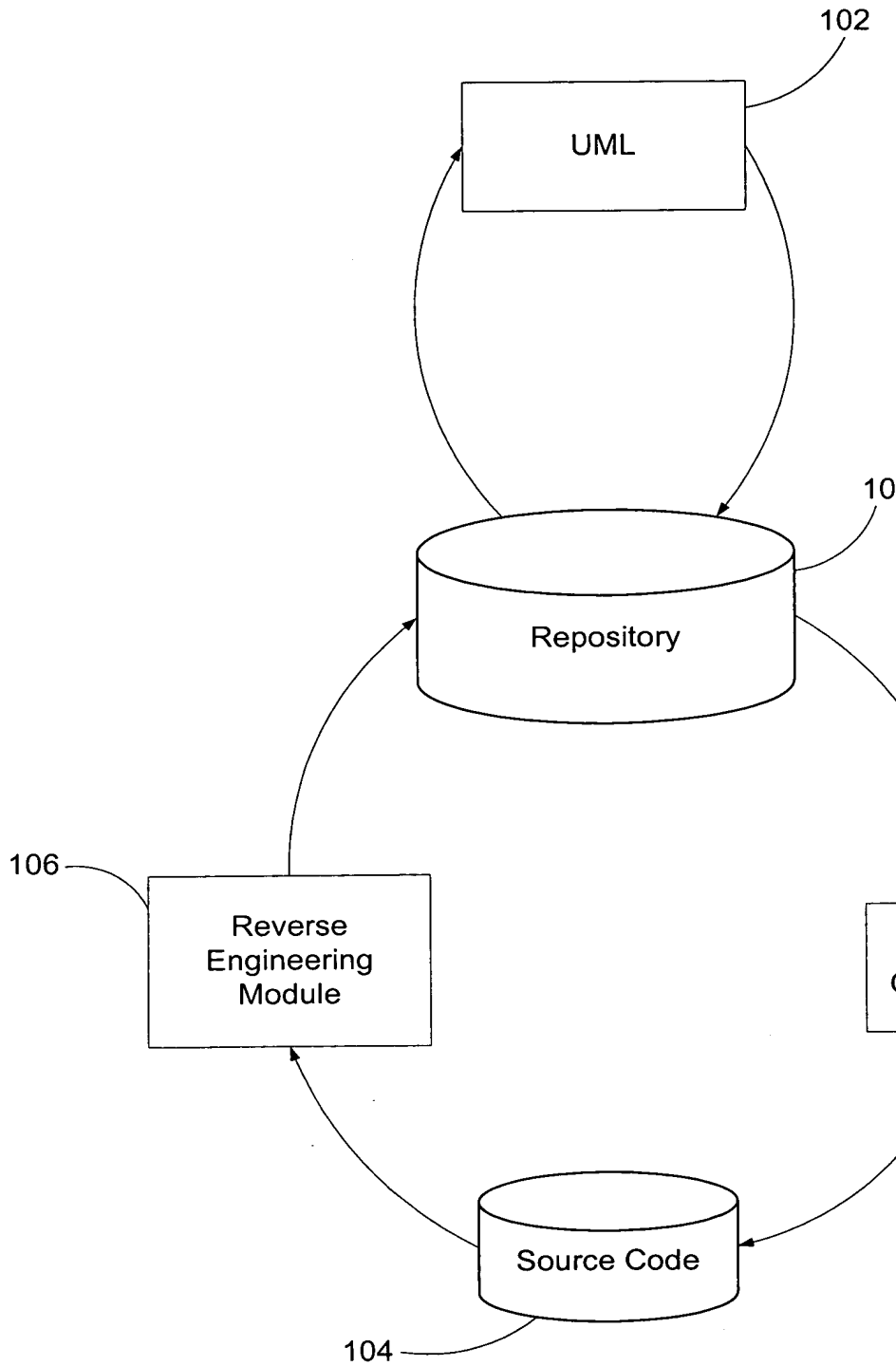


FIG. 1
(Prior Art)

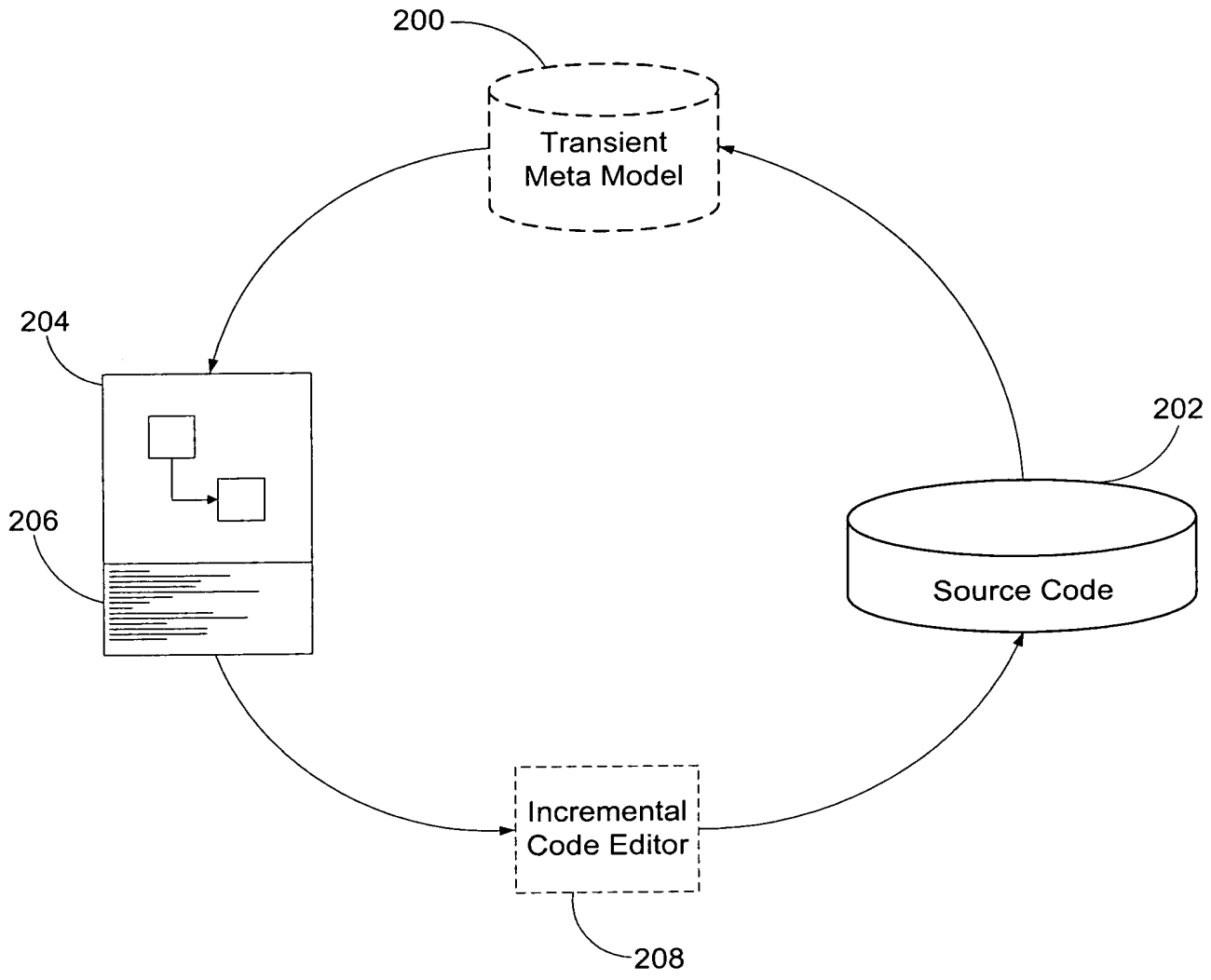

200
Transient
Meta Model
204
206
202
Source Code
Incremental
Code Editor
208

FIG. 2

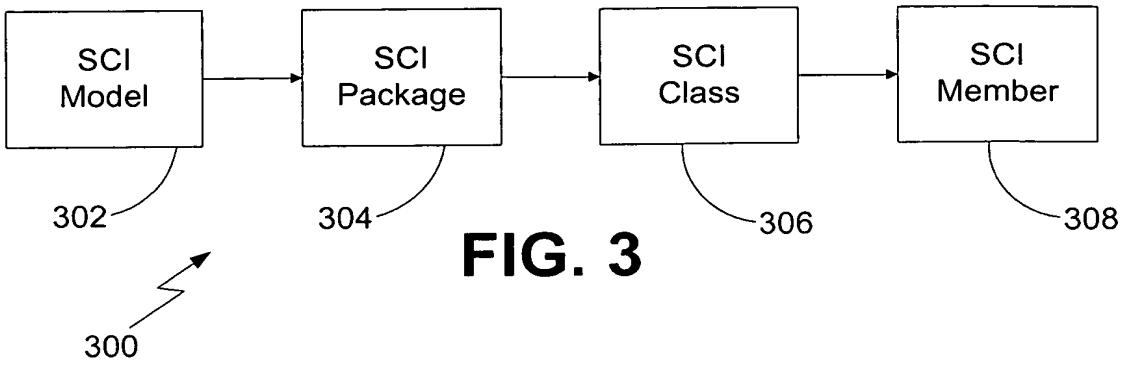


FIG. 3

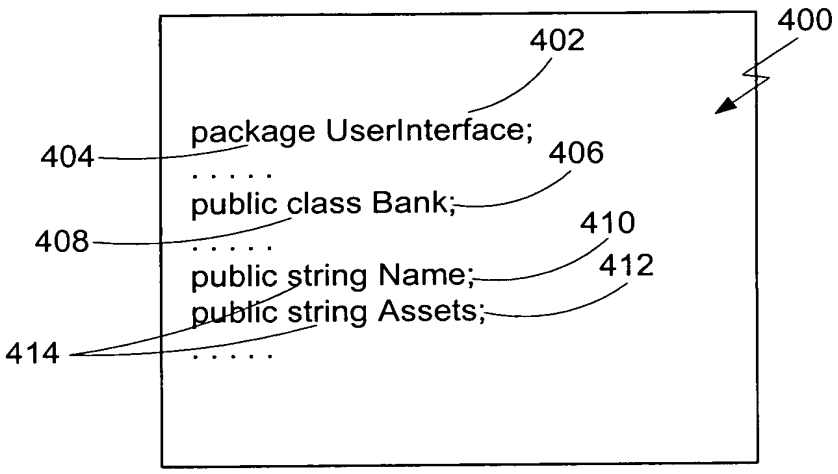


FIG. 4

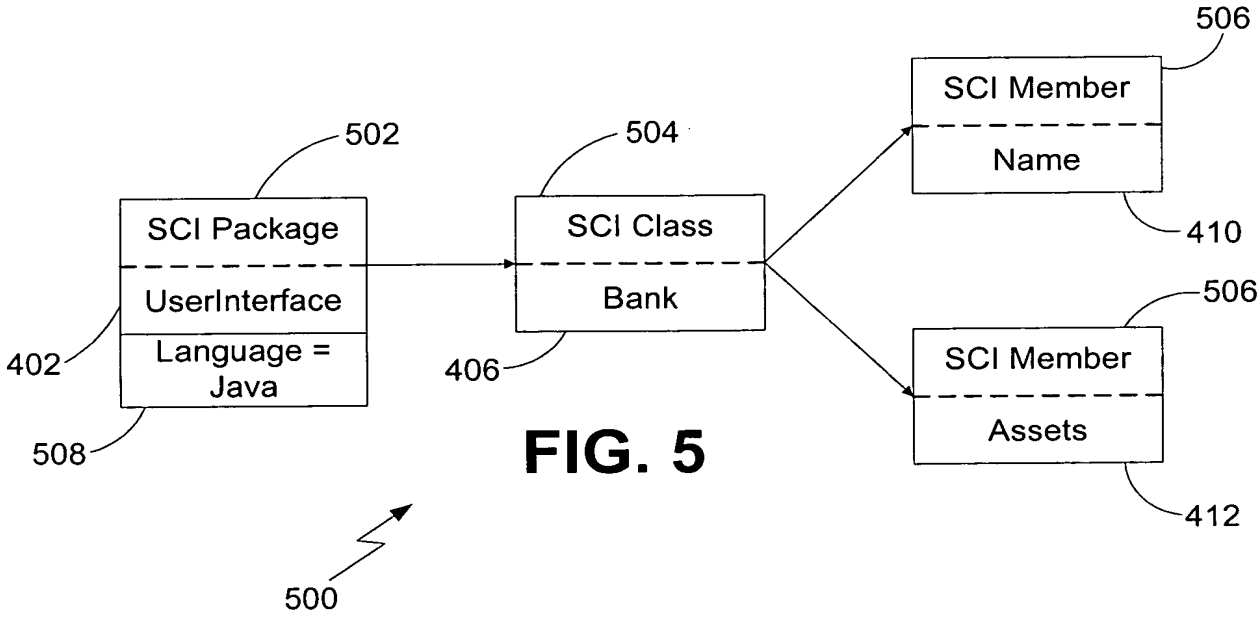


FIG. 5

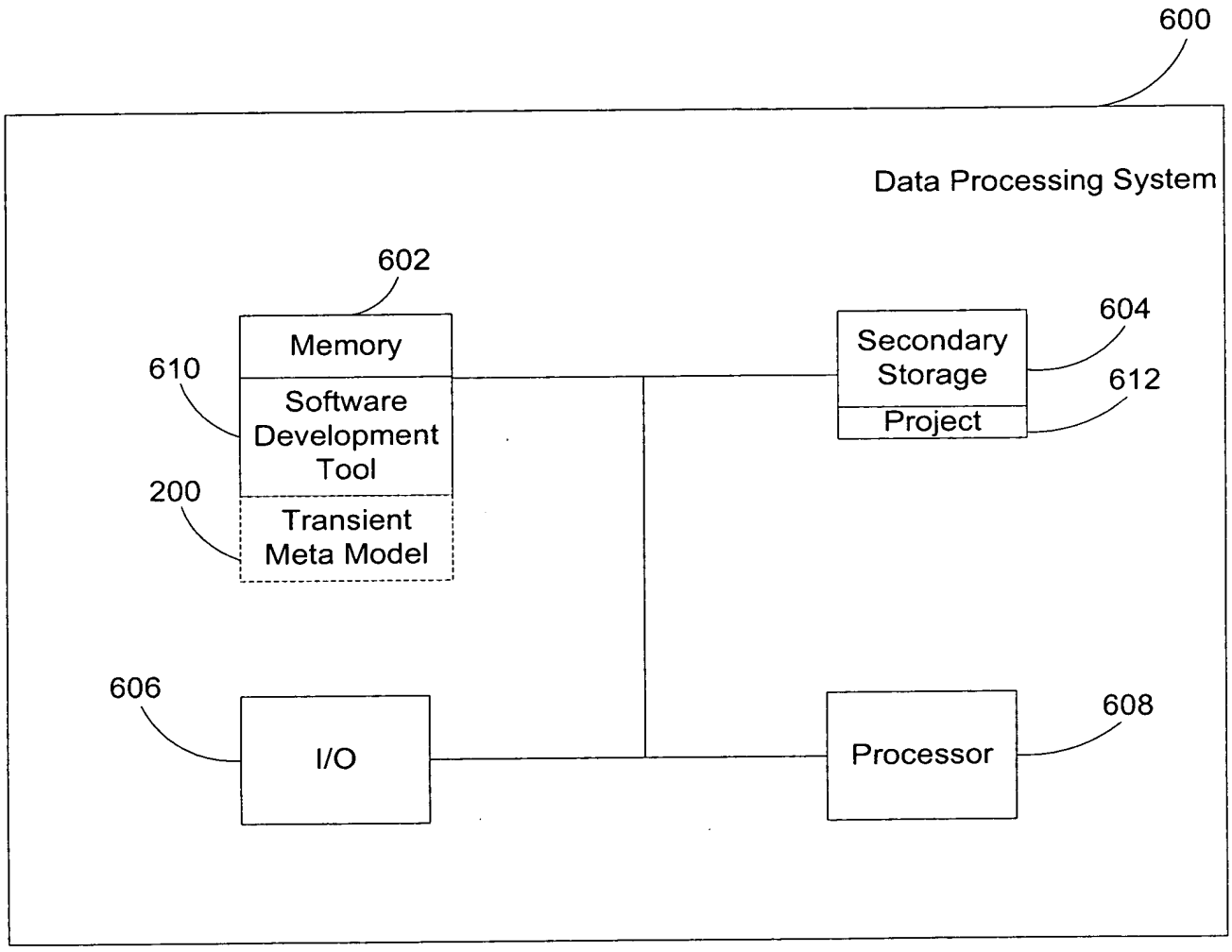

600
Data Processing System
602
Memory
610
Software Development Tool
200
Transient Meta Model
604
Secondary Storage
612
Project
606
I/O
608
Processor

FIG. 6

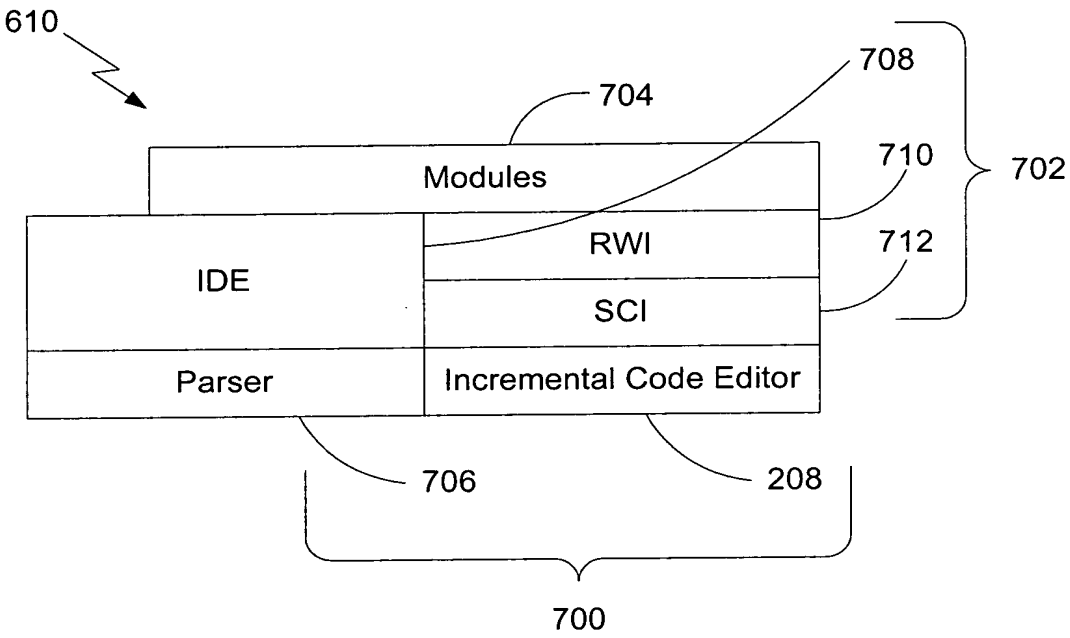

610
708
704
710
702
Modules
RWI
712
IDE
SCI
Parser
Incremental Code Editor
706
208
700

FIG. 7

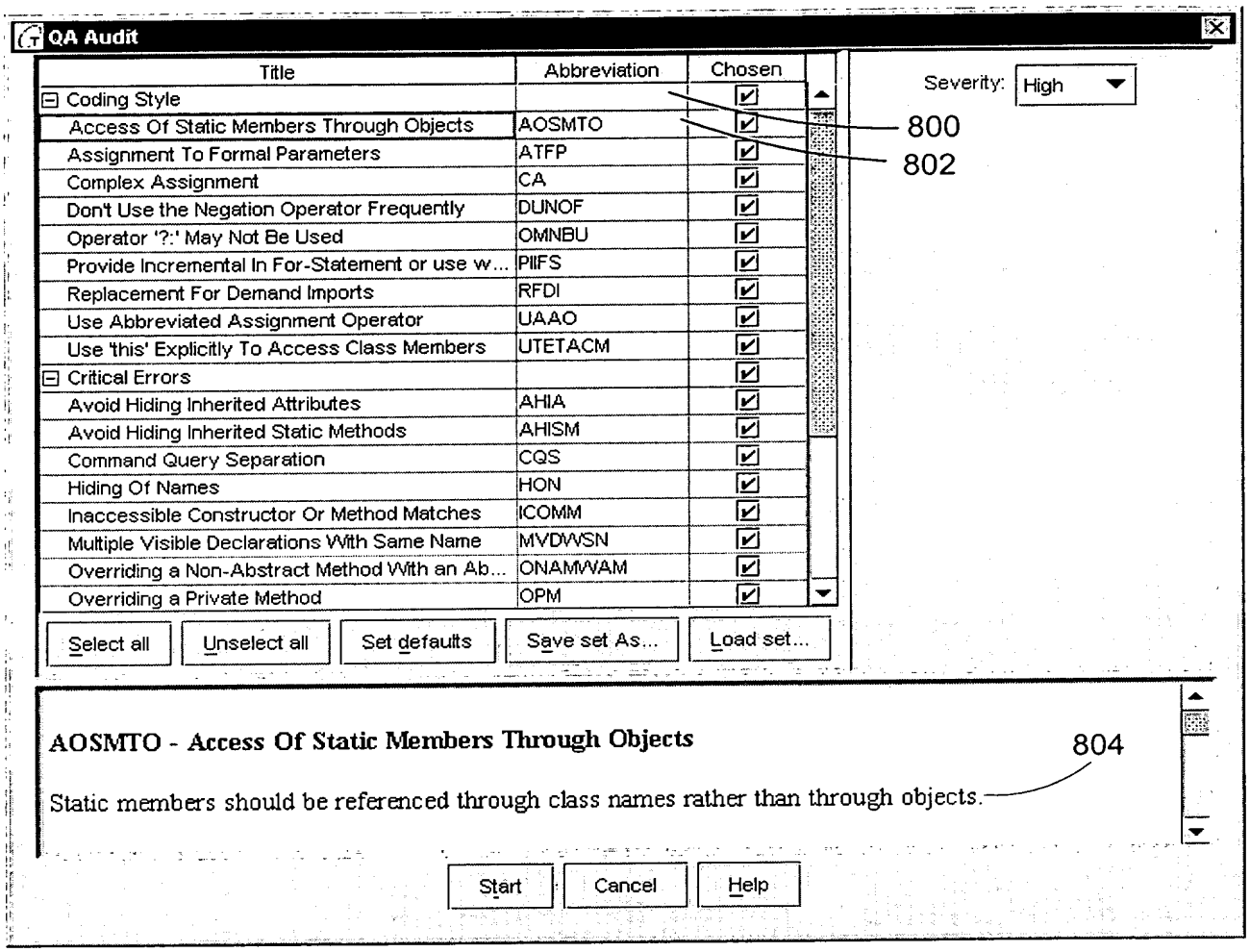

QA Audit
Title
Abbreviation
Chosen
Severity: High
Coding Style
Access Of Static Members Through Objects AOSMTO
Assignment To Formal Parameters ATFP
Complex Assignment CA
Don't Use the Negation Operator Frequently DUNOF
Operator '?:' May Not Be Used OMNBU
Provide Incremental In For-Statement or use w... PIIFS
Replacement For Demand Imports RFDI
Use Abbreviated Assignment Operator UAAO
Use 'this' Explicitly To Access Class Members UTETACM
Critical Errors
Avoid Hiding Inherited Attributes AHIA
Avoid Hiding Inherited Static Methods AHISM
Command Query Separation CQS
Hiding Of Names HON
Inaccessible Constructor Or Method Matches ICOMM
Multiple Visible Declarations With Same Name MVDWSN
Overriding a Non-Abstract Method With an Ab... ONAMWAM
Overriding a Private Method OPM
800
802
Select all
Unselect all
Set defaults
Save set As...
Load set...
AOSMTO - Access Of Static Members Through Objects
804
Static members should be referenced through class names rather than through objects.
Start
Cancel
Help

FIG. 8A

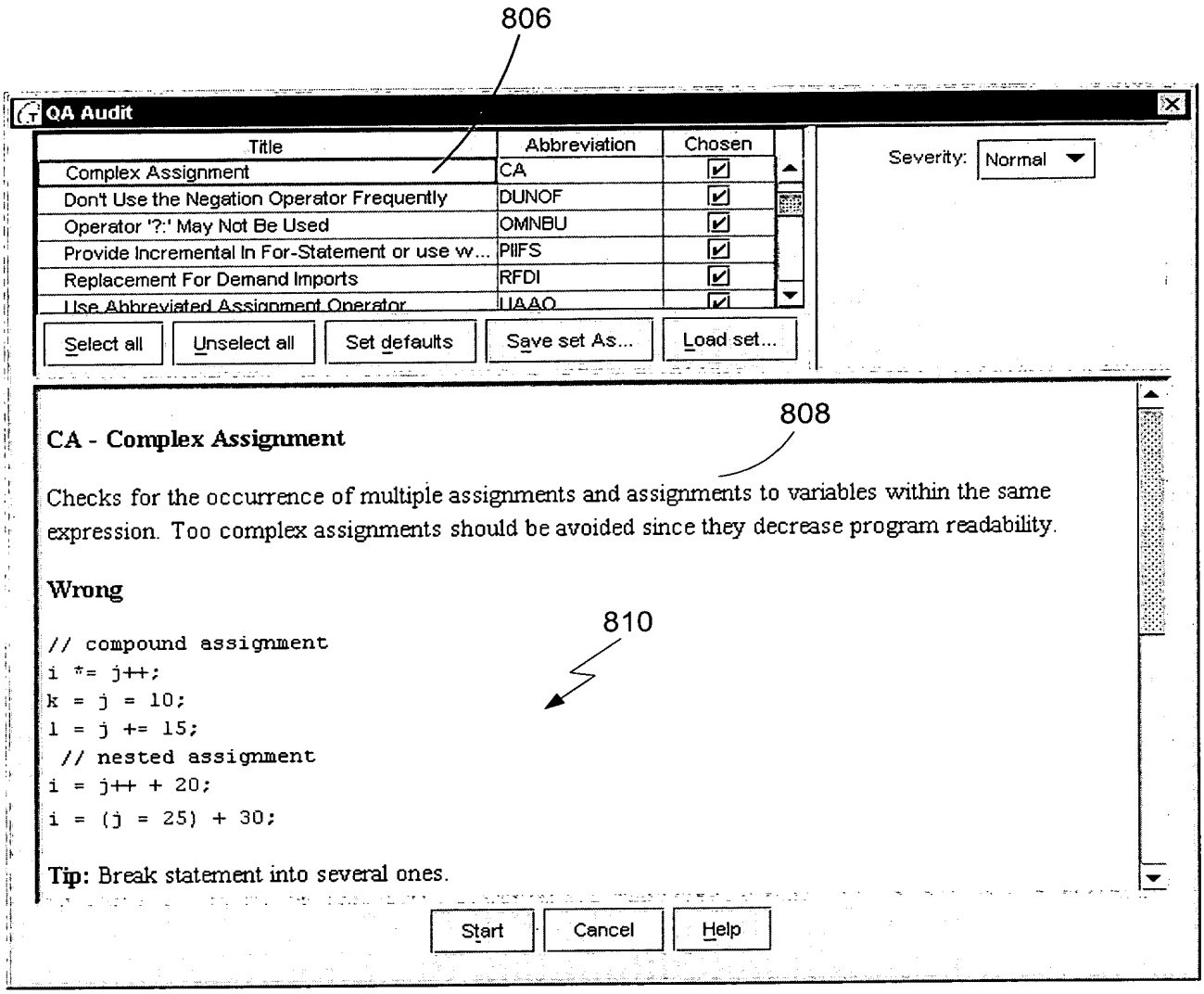

806
QA Audit
Title
Abbreviation
Chosen
Complex Assignment
CA
Don't Use the Negation Operator Frequently
DUNOF
Operator '?:' May Not Be Used
OMNBU
Provide Incremental In For-Statement or use w...
PIIFS
Replacement For Demand Imports
RFDI
Use Abbreviated Assignment Operator
UAAO
Severity:
Normal
Select all
Unselect all
Set defaults
Save set As...
Load set...
808
CA - Complex Assignment
Checks for the occurrence of multiple assignments and assignments to variables within the same expression. Too complex assignments should be avoided since they decrease program readability.
Wrong
810
// compound assignment
i *= j++;
k = j = 10;
l = j += 15;
// nested assignment
i = j++ + 20;
i = (j = 25) + 30;
Tip: Break statement into several ones.
Start
Cancel
Help

FIG. 8B

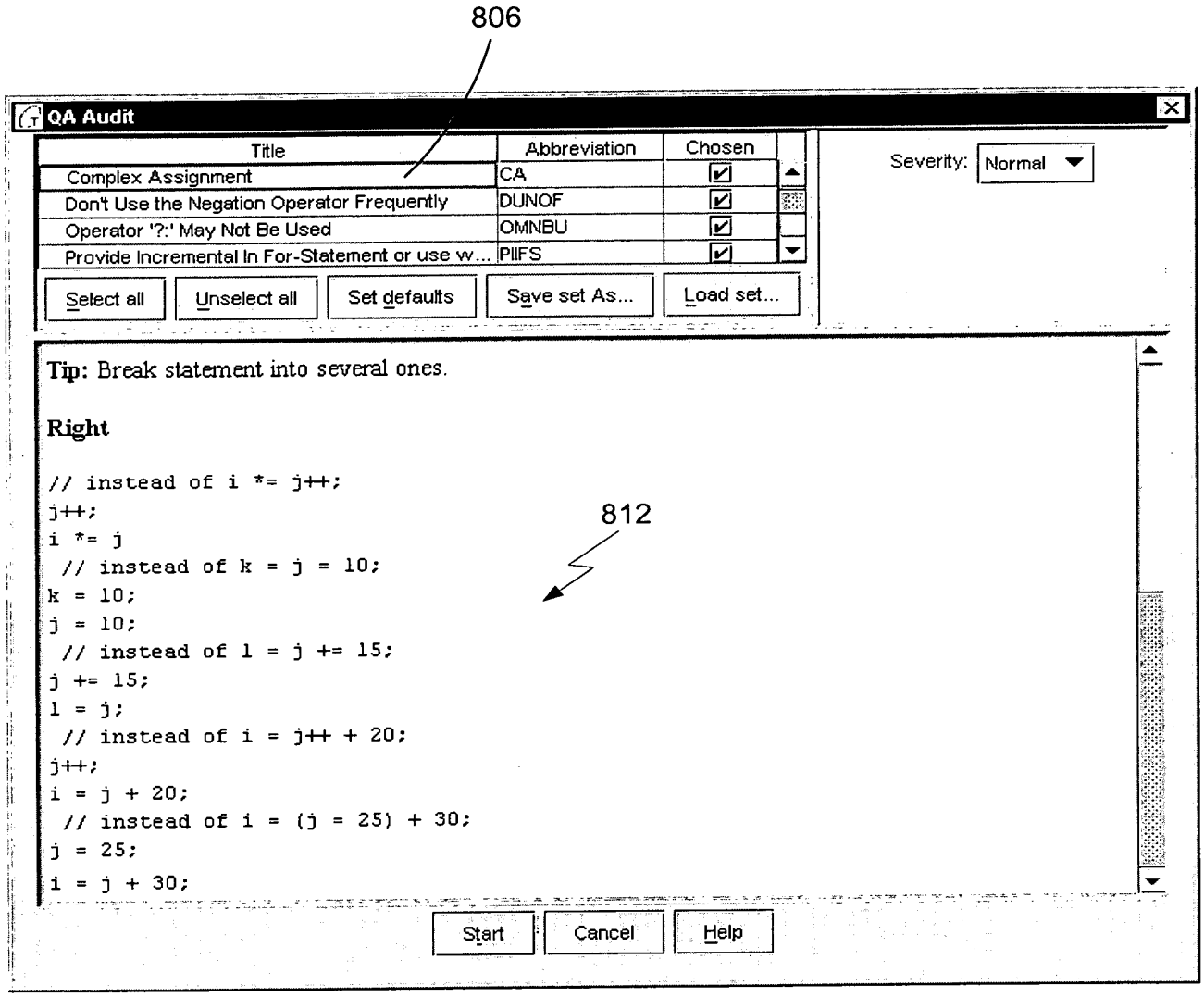

806
QA Audit
Title
Abbreviation
Chosen
Complex Assignment
CA
Don't Use the Negation Operator Frequently
DUNOF
Operator '?:' May Not Be Used
OMNBU
Provide Incremental In For-Statement or use w...
PIIFS
Severity:
Normal
Select all
Unselect all
Set defaults
Save set As...
Load set...
Tip: Break statement into several ones.
Right
// instead of i *= j++;
j++;
i *= j
// instead of k = j = 10;
k = 10;
j = 10;
// instead of l = j += 15;
j += 15;
l = j;
// instead of i = j++ + 20;
j++;
i = j + 20;
// instead of i = (j = 25) + 30;
j = 25;
i = j + 30;
812
Start
Cancel
Help

FIG. 8C

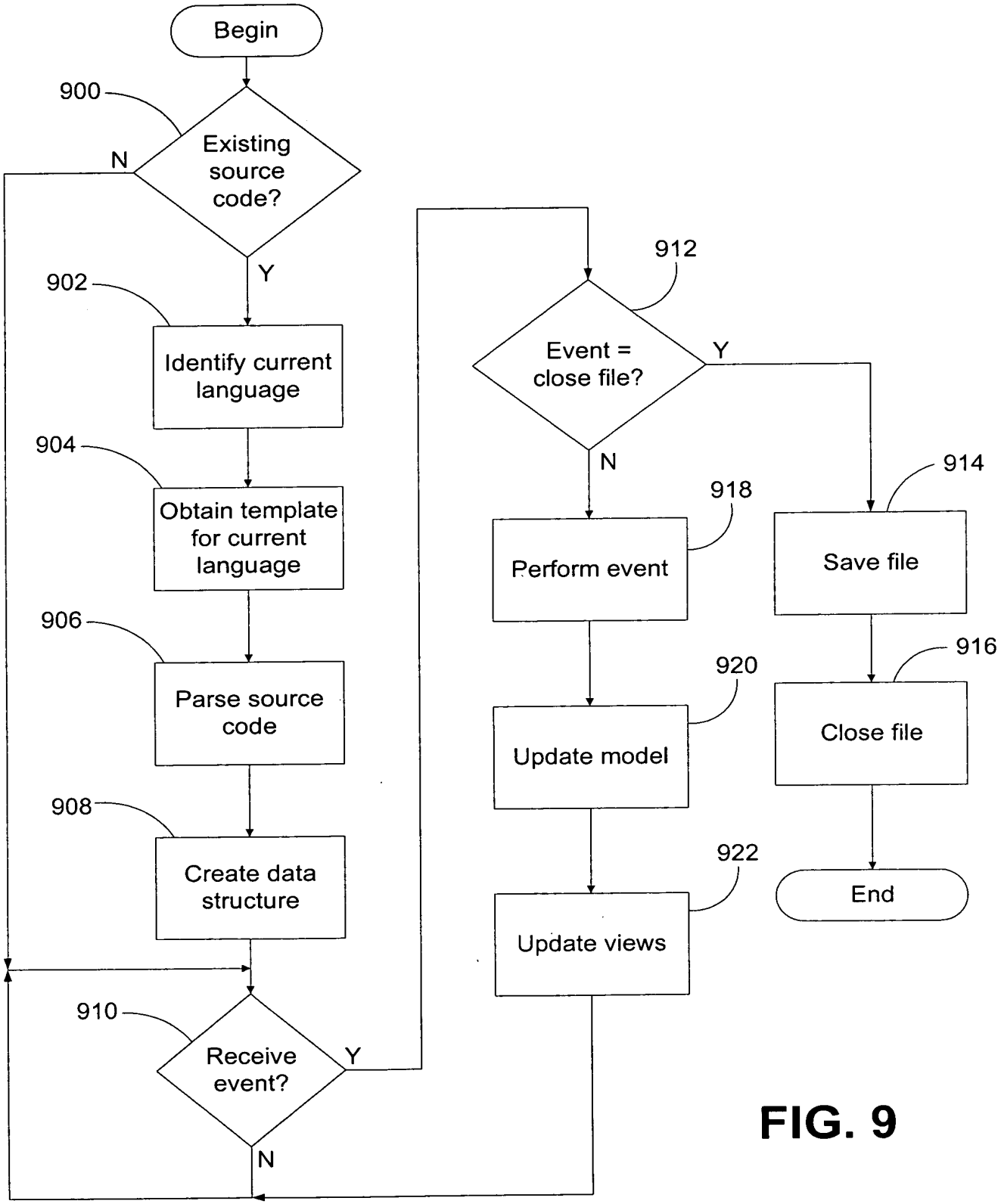

Begin
900
Existing source code?
N
Y
902
Identify current language
904
Obtain template for current language
906
Parse source code
908
Create data structure
910
Receive event?
Y
N
912
Event = close file?
Y
N
914
Save file
916
Close file
End
918
Perform event
920
Update model
922
Update views

FIG. 9

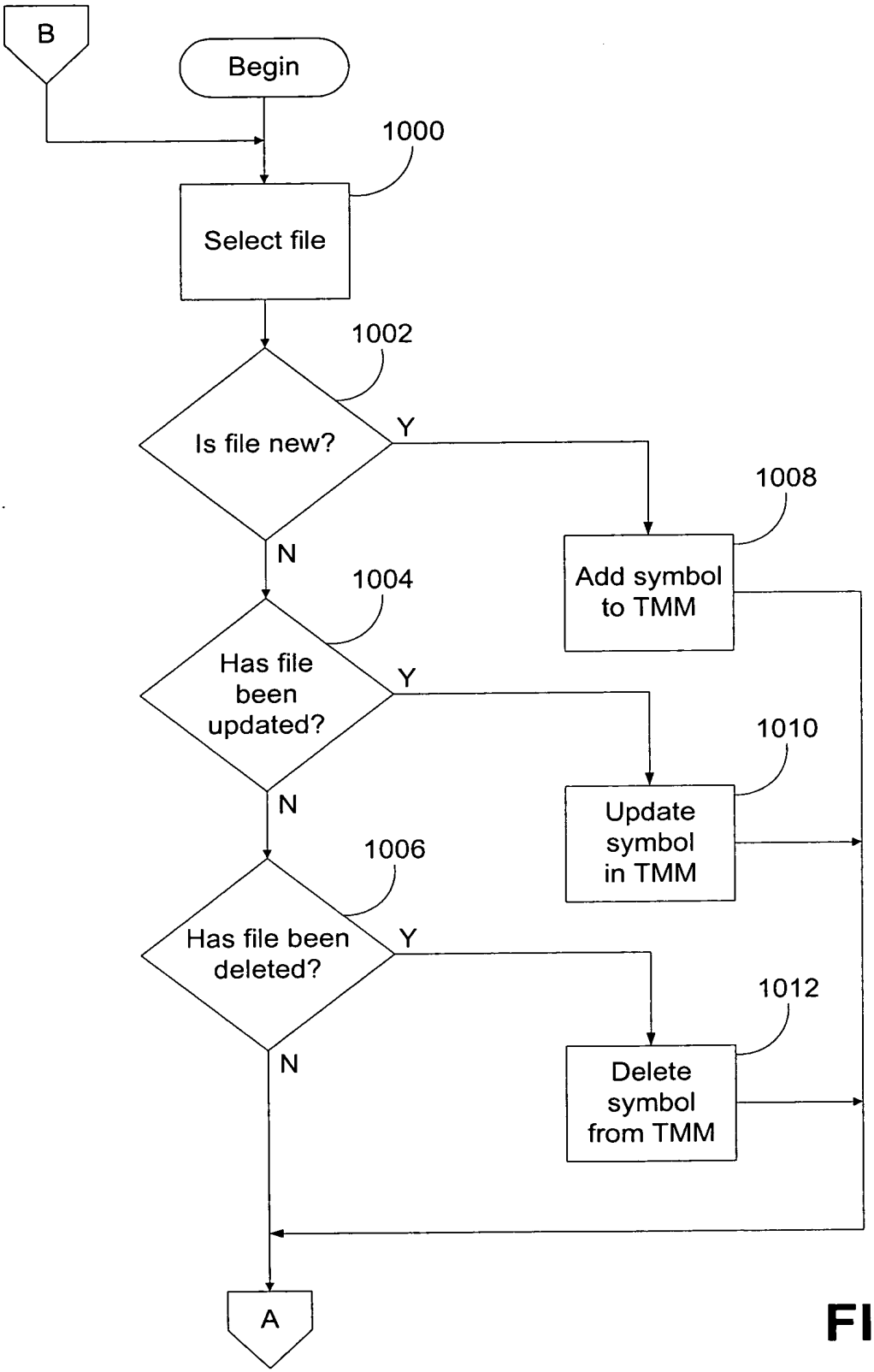

B
Begin
1000
Select file
1002
Is file new?
Y
N
1008
Add symbol to TMM
1004
Has file been updated?
Y
N
1010
Update symbol in TMM
1006
Has file been deleted?
Y
N
1012
Delete symbol from TMM
A

FIG. 10A

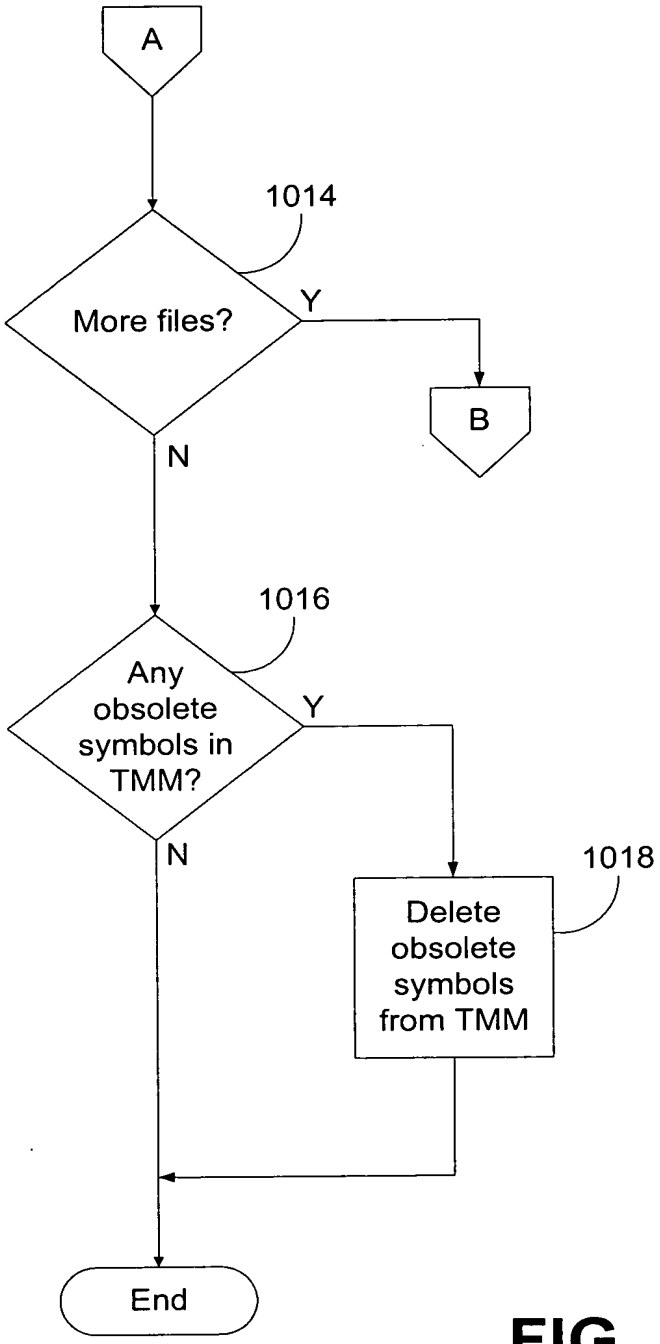

A
1014
More files?
Y
B
N
1016
Any obsolete symbols in TMM?
Y
N
1018
Delete obsolete symbols from TMM
End

FIG. 10B

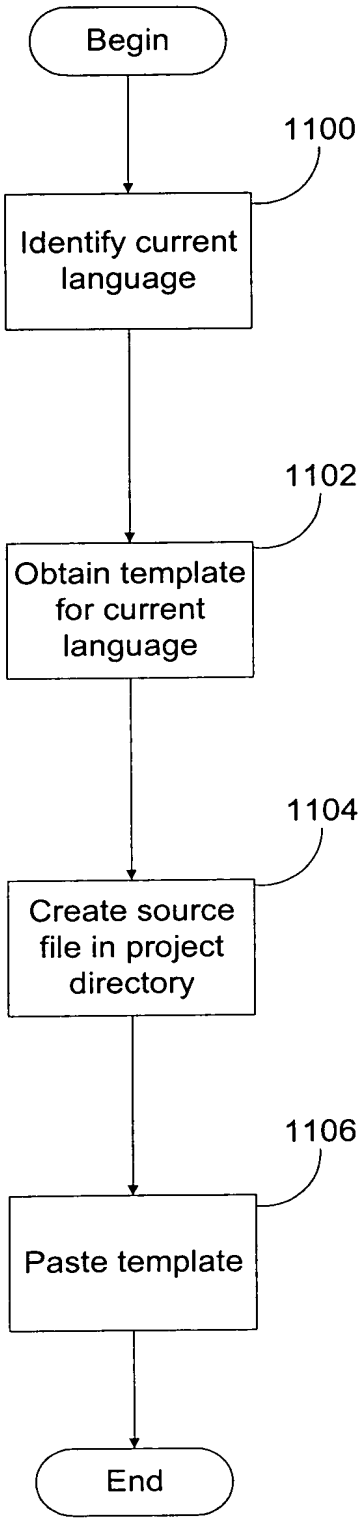

Begin
1100
Identify current language
1102
Obtain template for current language
1104
Create source file in project directory
1106
Paste template
End

FIG. 11

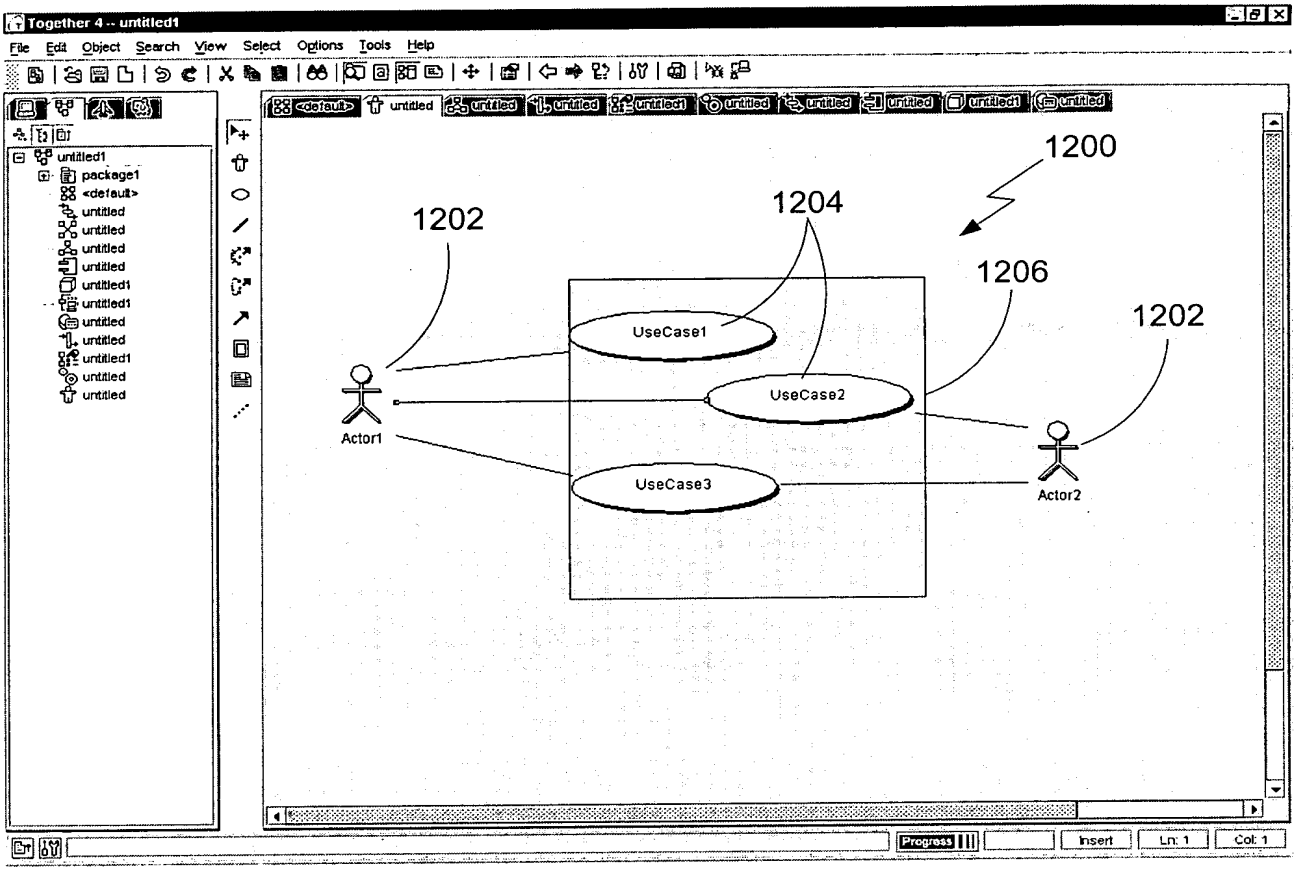

Together 4 -- untitled1
File Edit Object Search View Select Options Tools Help
untitled1
package1
<default>
1200
1202
1204
1206
1202
UseCase1
UseCase2
UseCase3
Actor1
Actor2
Progress
Insert
Ln: 1
Col: 1

FIG. 12

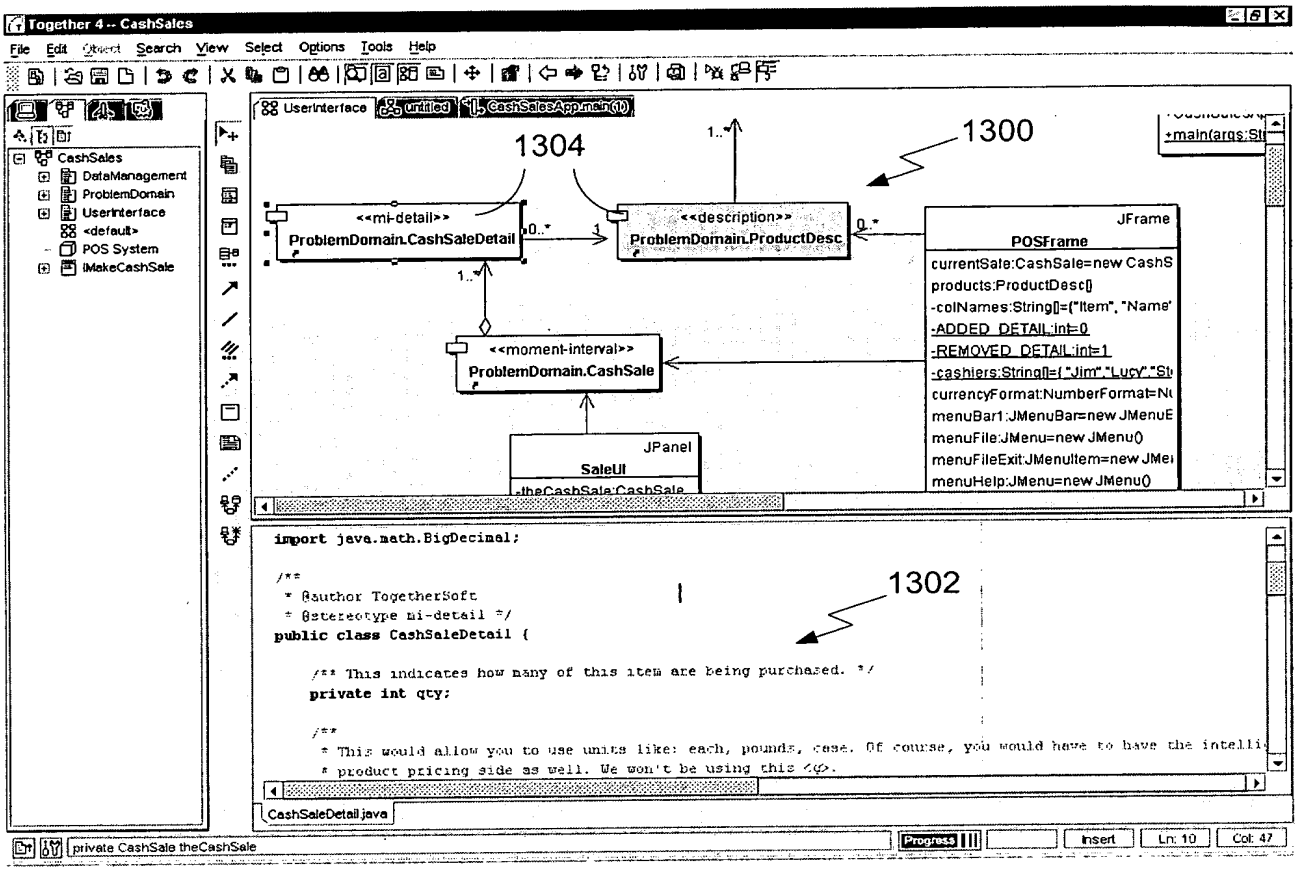

Together 4 -- CashSales
File Edit Search View Select Options Tools Help
CashSales
DataManagement
ProblemDomain
UserInterface
<default>
POS System
iMakeCashSale
UserInterface
untitled
CashSalesApp.main()
1304
1300
<<mi-detail>>
ProblemDomain.CashSaleDetail
<<description>>
ProblemDomain.ProductDesc
JFrame
POSFrame
currentSale:CashSale=new CashS
products:ProductDesc[]
-colNames:String[]={"Item", "Name"
-ADDED_DETAIL:int=0
-REMOVED_DETAIL:int=1
menuBar1:JMenuBar=new JMenuE
menuFile:JMenu=new JMenu()
menuFileExit:JMenuItem=new JMe
menuHelp:JMenu=new JMenu()
<<moment-interval>>
ProblemDomain.CashSale
JPanel
SaleUI
import java.math.BigDecimal;
/**
* @author TogetherSoft
* @stereotype mi-detail */
public class CashSaleDetail {
1302
/** This indicates how many of this item are being purchased. */
private int qty;
CashSaleDetail.java
private CashSale theCashSale
Progress
Insert
Ln: 10
Col: 47

FIG. 13

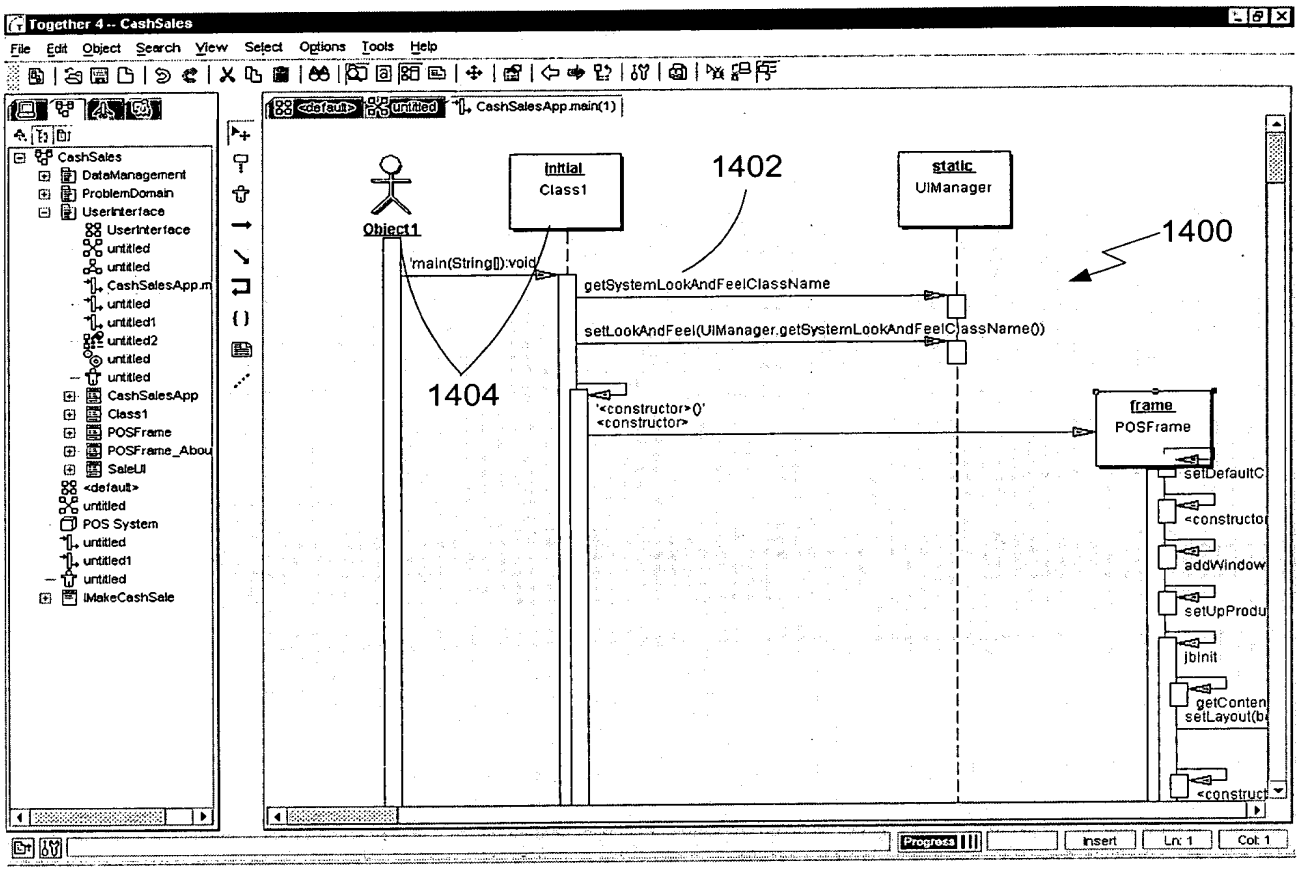

Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
CashSales
DataManagement
ProblemDomain
UserInterface
UserInterface
untitled
untitled
CashSalesApp.m
untitled
untitled1
untitled2
untitled
untitled
CashSalesApp
Class1
POSFrame
POSFrame_Abou
SaleUI
<default>
untitled
POS System
untitled
untitled1
untitled
IMakeCashSale
<default>
untitled
CashSalesApp.main(1)
Object1
initial
Class1
static
UIManager
1402
1400
'main(String[]):void'
getSystemLookAndFeelClassName
setLookAndFeel(UIManager.getSystemLookAndFeelClassName())
1404
'<constructor>()'
<constructor>
frame
POSFrame
setDefaultC
<constructo
addWindow
setUpProdu
jbInit
getConten
setLayout(b
<construct
Progress
Insert
Ln: 1
Col: 1

FIG. 14

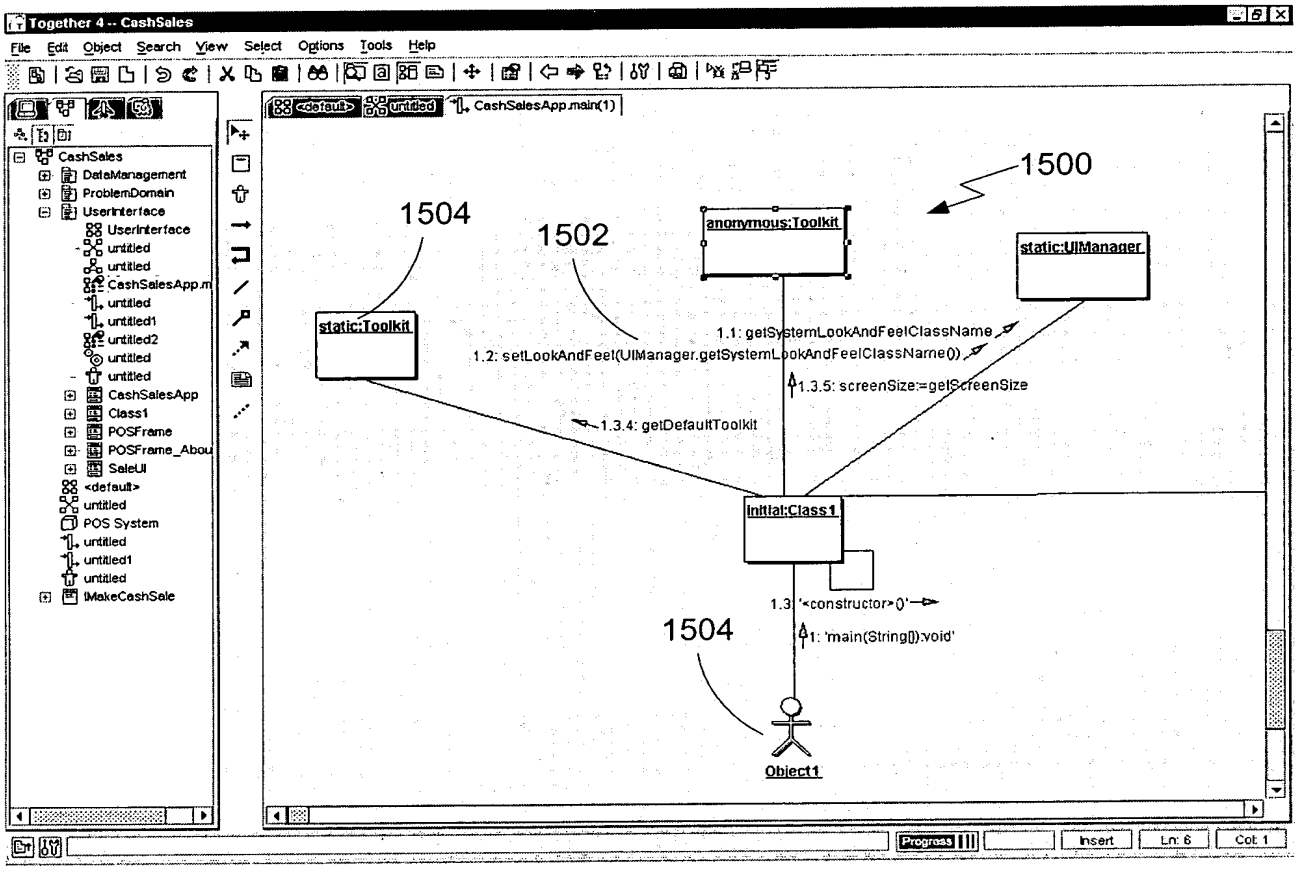

Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
CashSales
DataManagement
ProblemDomain
UserInterface
UserInterface
untitled
untitled
CashSalesApp.m
untitled
untitled1
untitled2
untitled
untitled
CashSalesApp
Class1
POSFrame
POSFrame_Abou
SaleUI
<default>
untitled
POS System
untitled
untitled1
untitled
tMakeCashSale
<default>
untitled
CashSalesApp.main(1)
1500
1504
1502
anonymous:Toolkit
static:UIManager
static:Toolkit
1.1: getSystemLookAndFeelClassName
1.2: setLookAndFeel(UIManager.getSystemLookAndFeelClassName())
1.3.5: screenSize:=getScreenSize
1.3.4: getDefaultToolkit
initial:Class1
1.3: '<constructor>()'
1: 'main(String[]):void'
1504
Object1
Insert
Ln: 6
Col: 1

FIG. 15

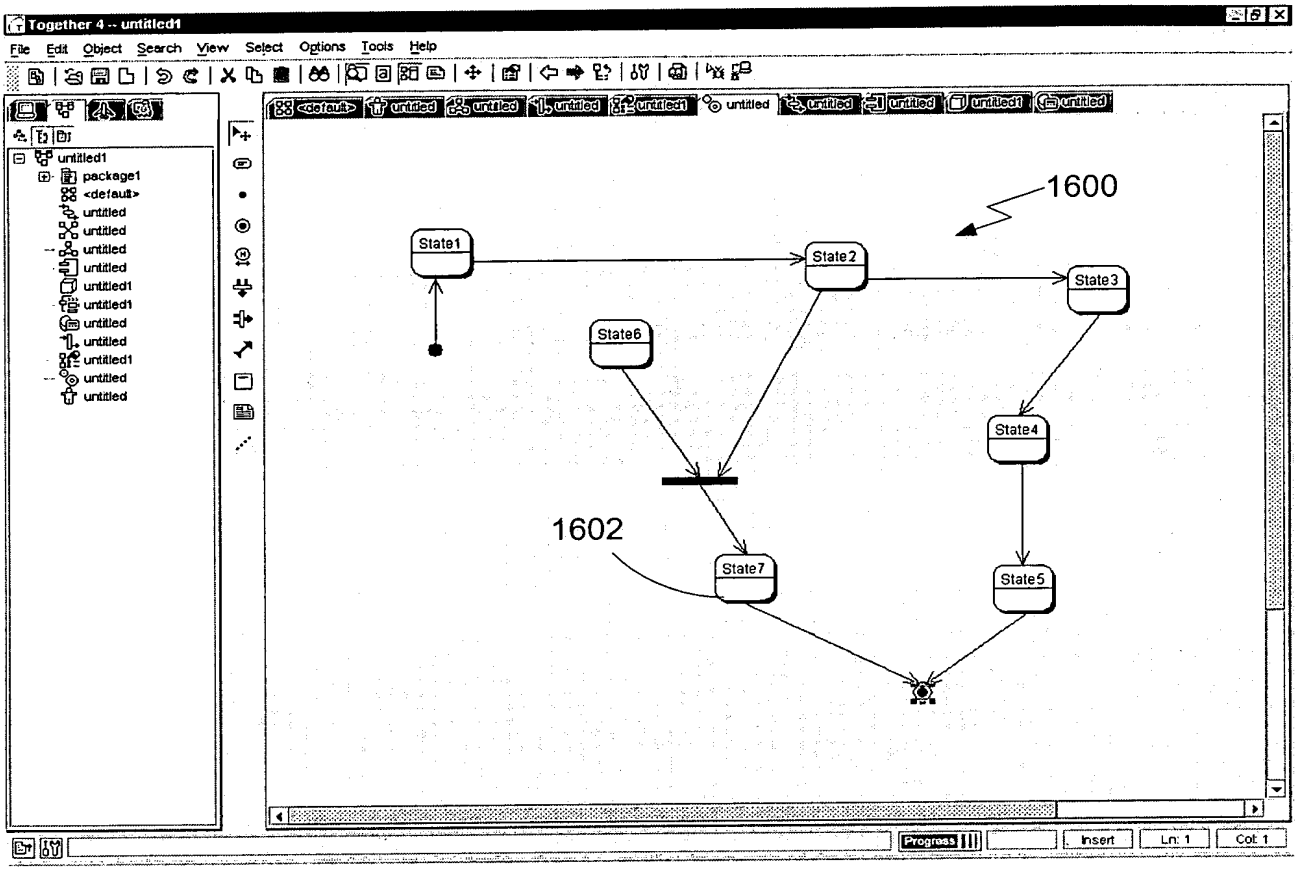

Together 4 -- untitled1
File Edit Object Search View Select Options Tools Help
untitled1
package1
<default>
untitled
untitled1
1600
State1
State2
State3
State4
State5
State6
State7
1602
Progress
Insert
Ln: 1
Col: 1

FIG. 16

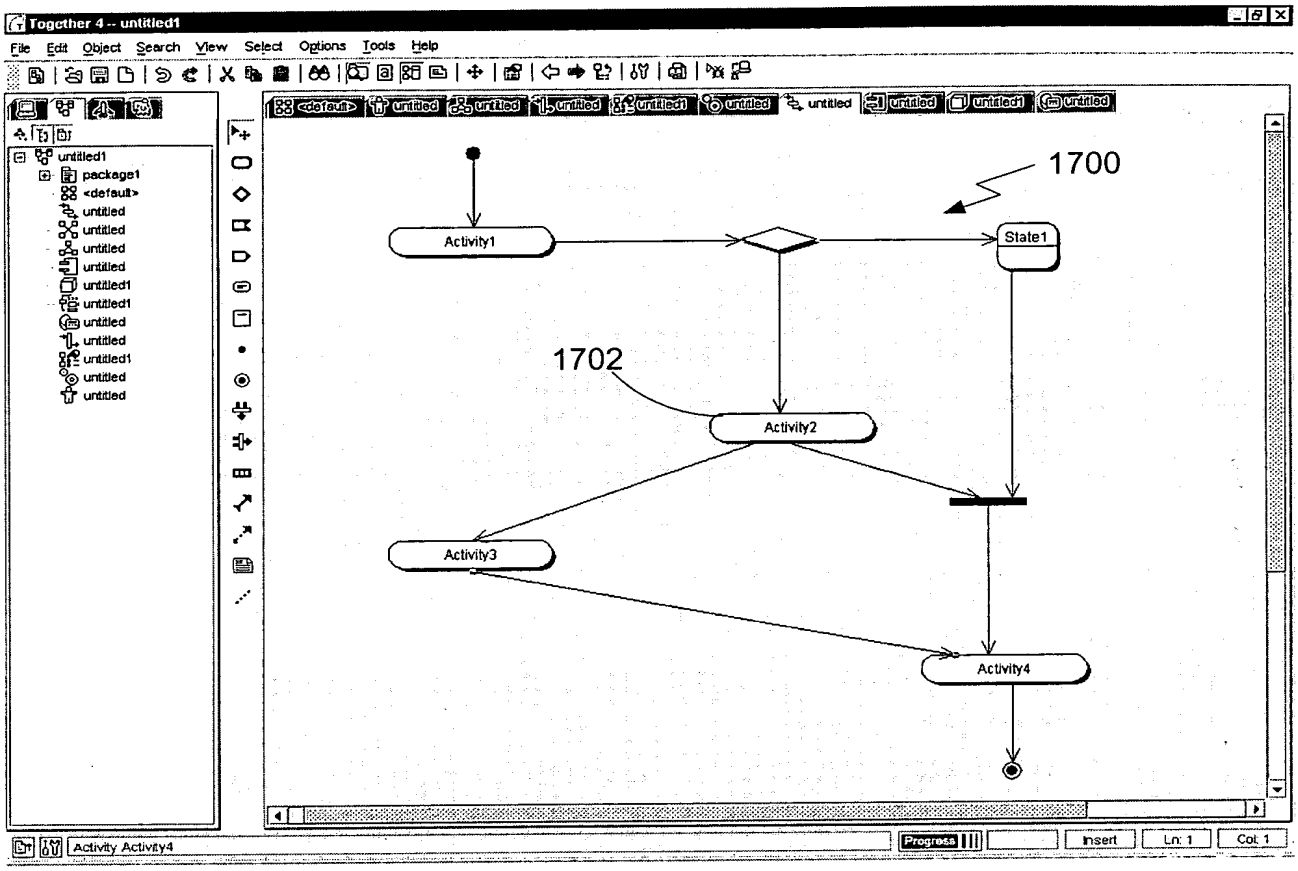

Togcther 4 -- untitled1
File Edit Object Search View Select Options Tools Help
untitled1
package1
<default>
untitled
untitled
untitled
untitled
untitled1
untitled1
untitled
untitled
untitled1
untitled
untitled
1700
Activity1
State1
1702
Activity2
Activity3
Activity4
Activity Activity4
Progress
Insert
Ln: 1
Col: 1

FIG. 17

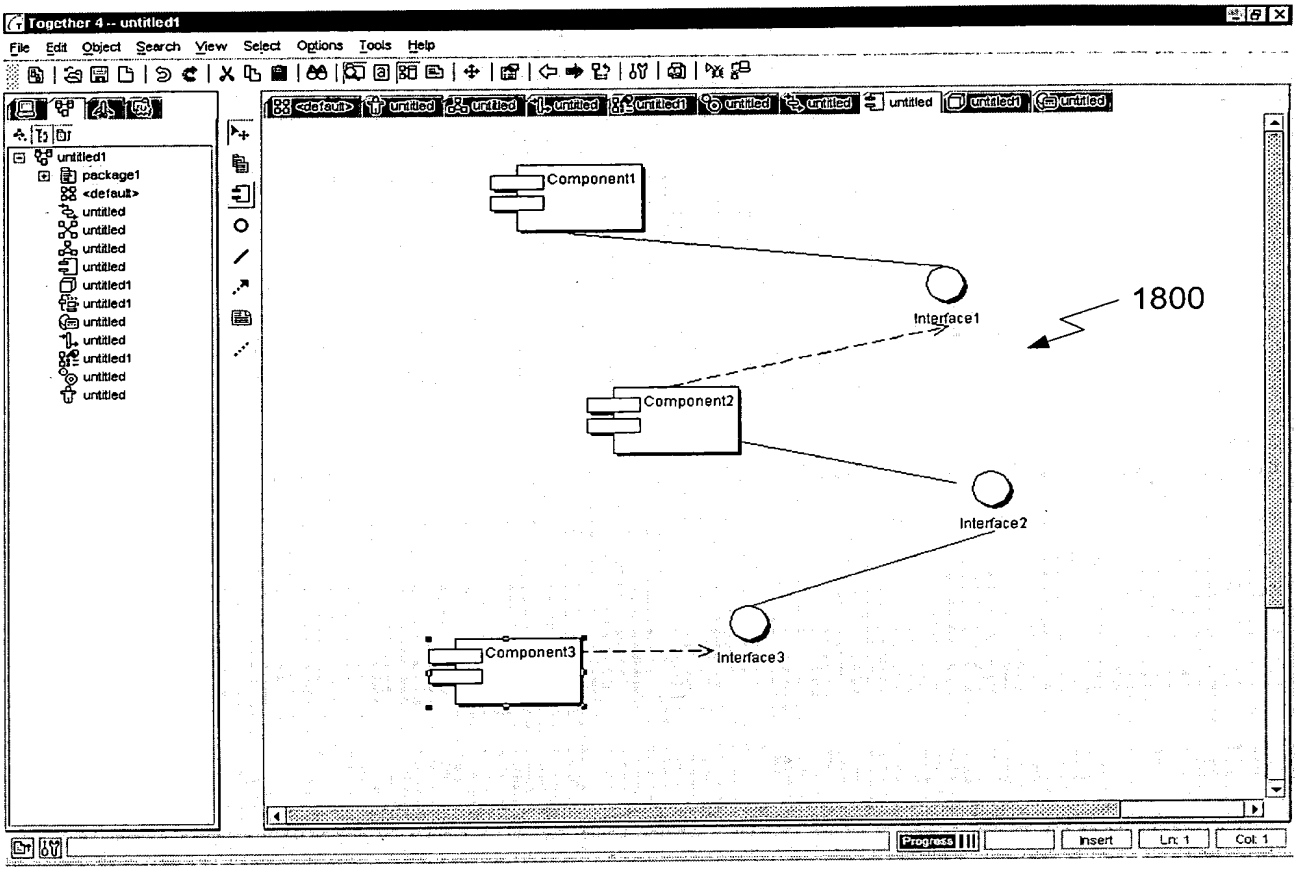

Together 4 -- untitled1
File Edit Object Search View Select Options Tools Help
untitled1
package1
<default>
Component1
Interface1
1800
Component2
Interface2
Component3
Interface3
Progress
Insert
Ln: 1
Col: 1

FIG. 18

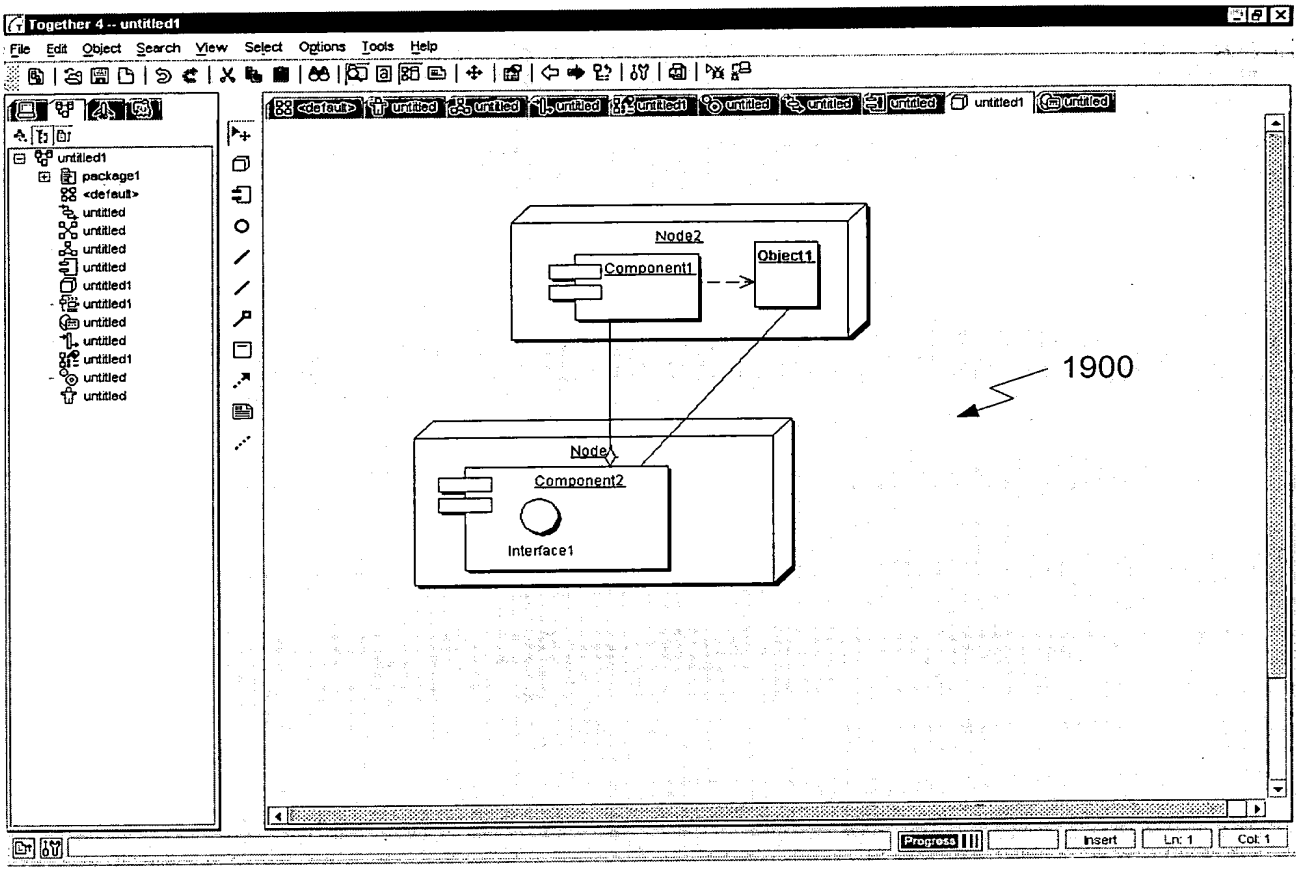

Together 4 -- untitled1
File Edit Object Search View Select Options Tools Help
untitled1
package1
<default>
Node2
Component1
Object1
Node
Component2
Interface1
1900
Progress
Insert
Ln: 1
Col: 1

FIG. 19

FIG. 20

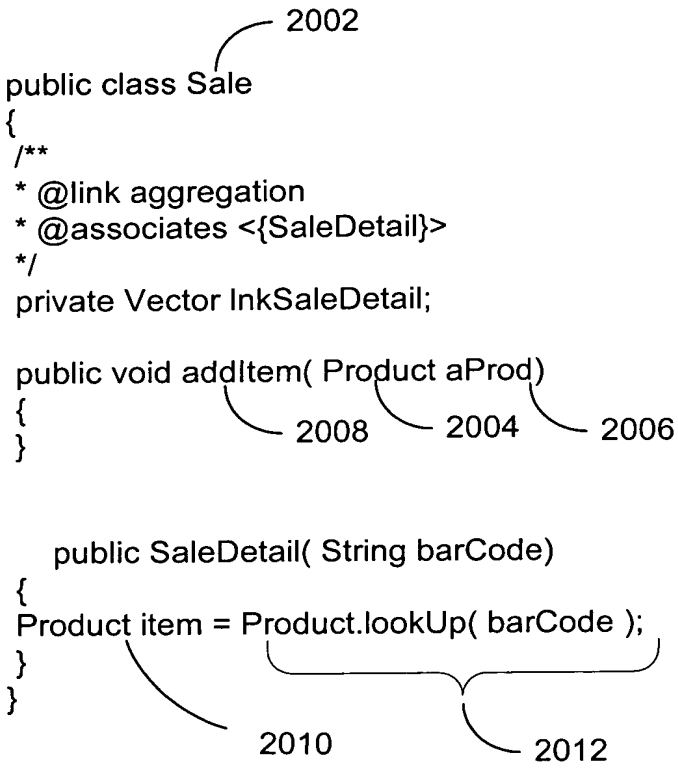

2002
public class Sale
{
/**
* @link aggregation
* @associates <{SaleDetail}>
*/
private Vector lnkSaleDetail;
public void addItem(Product aProd)
{
}
2008
2004
2006
public SaleDetail(String barCode)
{
Product item = Product.lookUp(barCode);
}
}
2010
2012

FIG. 21

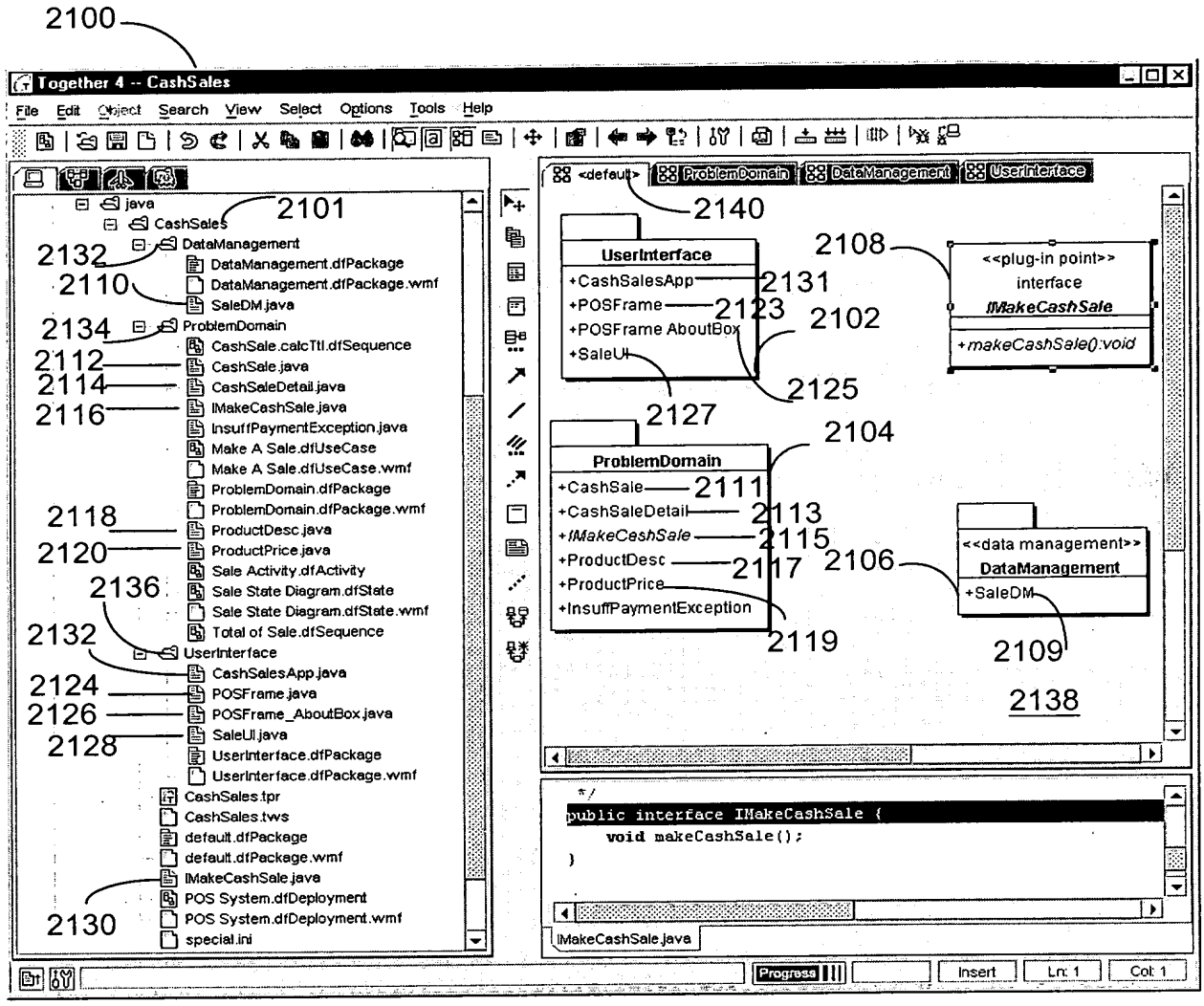

2100
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
java
CashSales
2101
DataManagement
2132
DataManagement.dfPackage
DataManagement.dfPackage.wmf
2110
SaleDM.java
2134
ProblemDomain
CashSale.calcTtl.dfSequence
2112
CashSale.java
2114
CashSaleDetail.java
2116
IMakeCashSale.java
InsuffPaymentException.java
Make A Sale.dfUseCase
Make A Sale.dfUseCase.wmf
ProblemDomain.dfPackage
ProblemDomain.dfPackage.wmf
2118
ProductDesc.java
2120
ProductPrice.java
Sale Activity.dfActivity
2136
Sale State Diagram.dfState
Sale State Diagram.dfState.wmf
Total of Sale.dfSequence
2132
UserInterface
2124
CashSalesApp.java
2126
POSFrame.java
POSFrame_AboutBox.java
2128
SaleUI.java
UserInterface.dfPackage
UserInterface.dfPackage.wmf
CashSales.tpr
CashSales.tws
default.dfPackage
default.dfPackage.wmf
IMakeCashSale.java
POS System.dfDeployment
2130
POS System.dfDeployment.wmf
special.ini
<default>
ProblemDomain
DataManagement
UserInterface
2140
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
2131
2123
2102
2125
2127
2108
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
2104
ProblemDomain
+CashSale
2111
+CashSaleDetail
2113
+IMakeCashSale
2115
+ProductDesc
2117
+ProductPrice
+InsuffPaymentException
2119
2106
<<data management>>
DataManagement
+SaleDM
2109
2138
*/
public interface IMakeCashSale {
void makeCashSale();
}
IMakeCashSale.java
Progress
Insert
Ln: 1
Col: 1

FIG. 22A

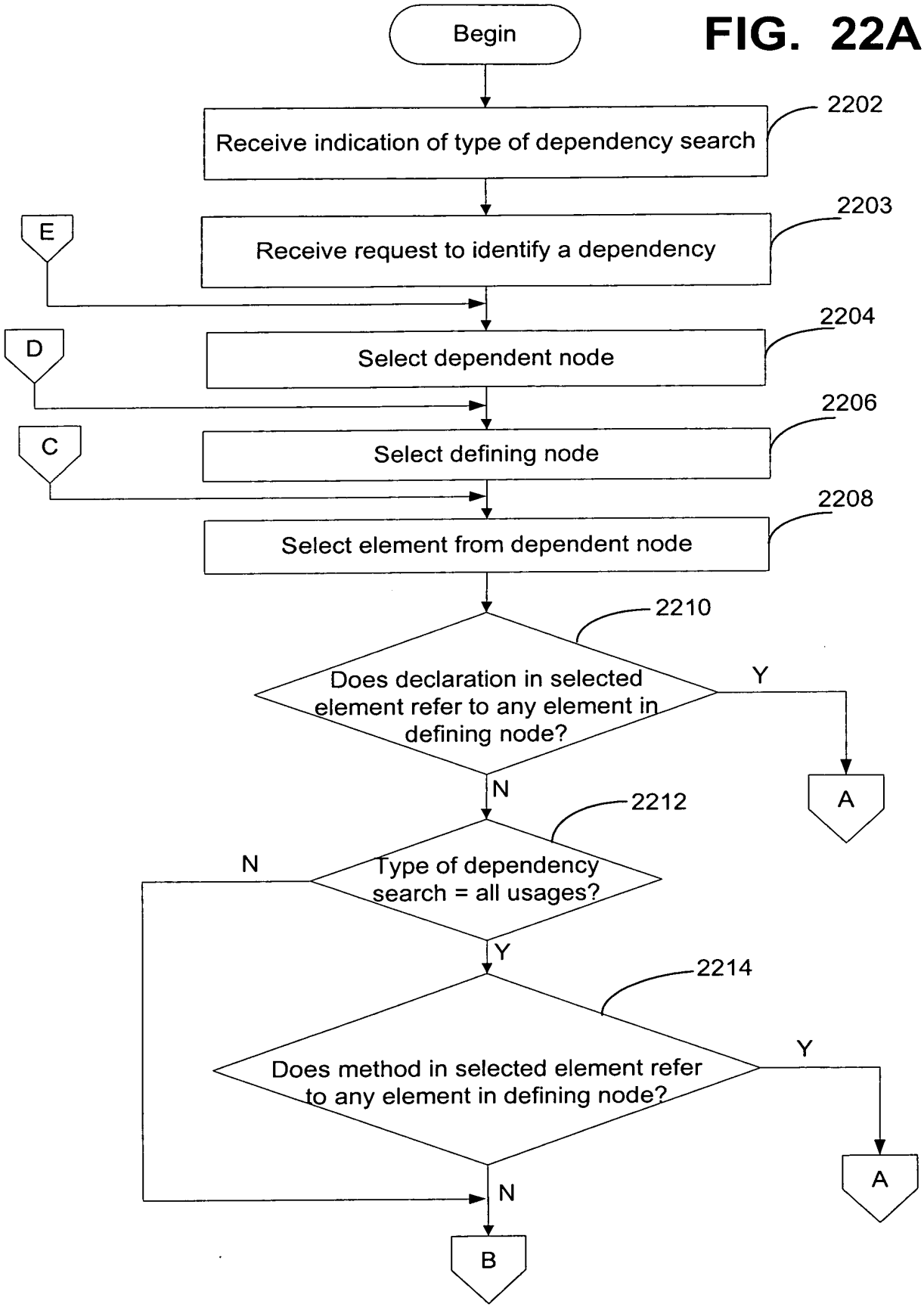

Begin
Receive indication of type of dependency search
2202
Receive request to identify a dependency
2203
E
Select dependent node
2204
D
Select defining node
2206
C
Select element from dependent node
2208
Does declaration in selected element refer to any element in defining node?
2210
Y
A
N
Type of dependency search = all usages?
2212
N
Y
Does method in selected element refer to any element in defining node?
2214
Y
A
N
B

FIG. 22B

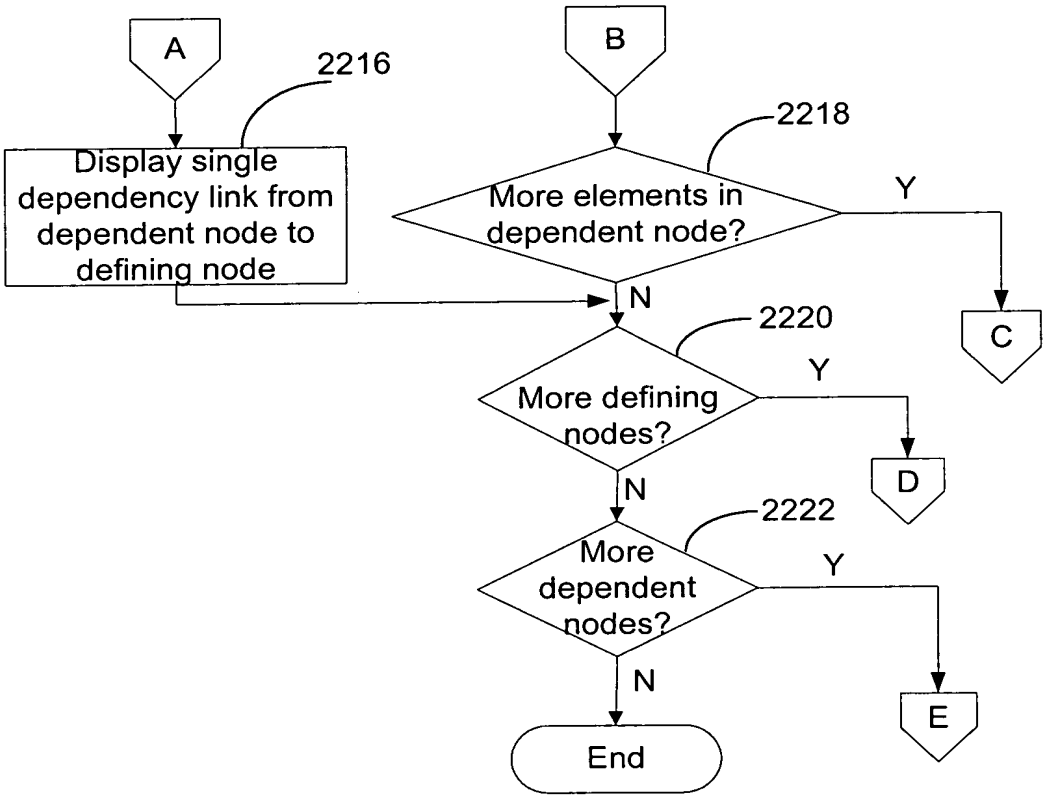

A
2216
Display single dependency link from dependent node to defining node
B
2218
More elements in dependent node?
Y
C
N
2220
More defining nodes?
Y
D
N
2222
More dependent nodes?
Y
E
N
End

FIG. 23

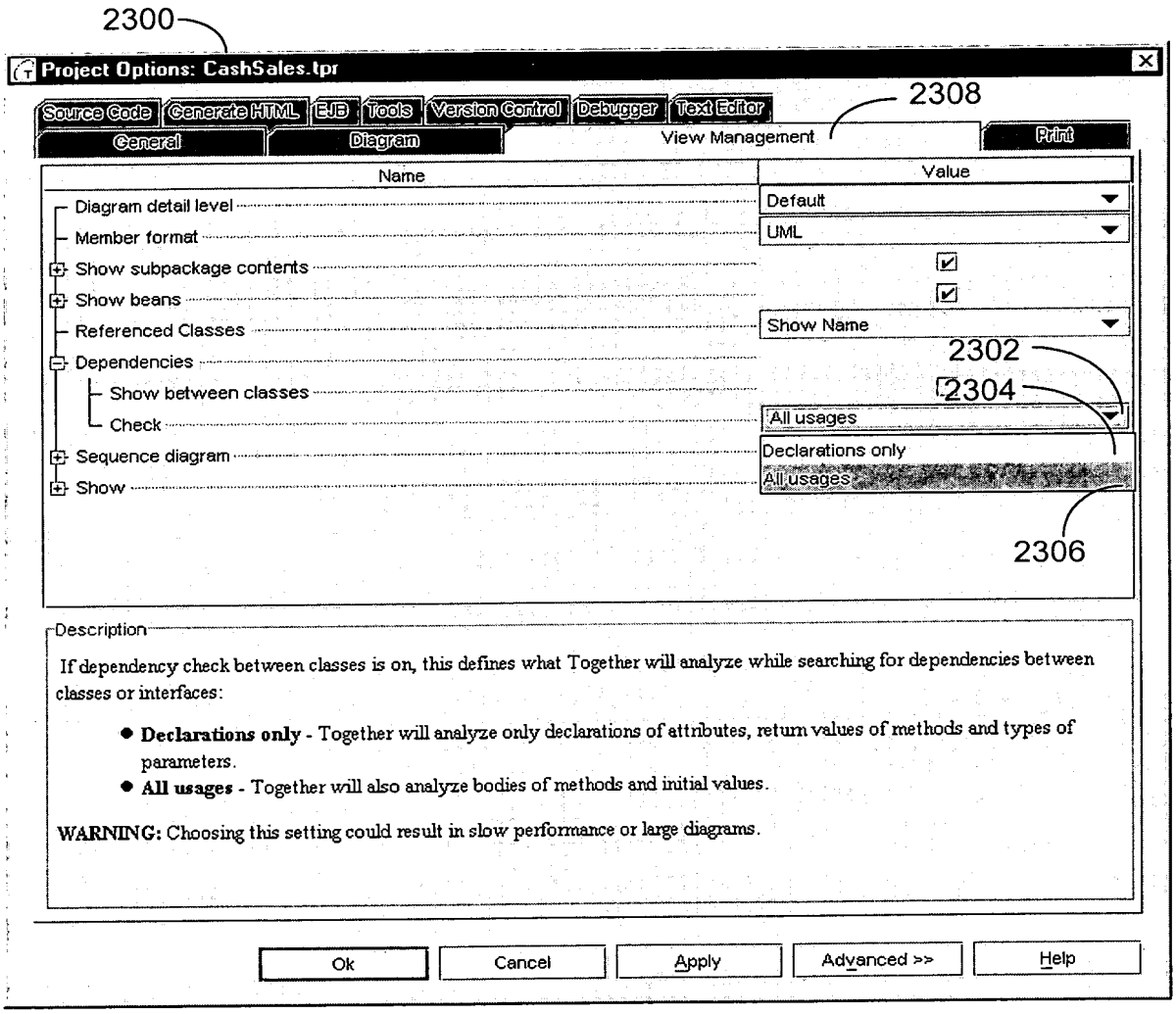

2300
Project Options: CashSales.tpr
Source Code
Generate HTML
EJB
Tools
Version Control
Debugger
Text Editor
General
Diagram
View Management
Print
2308
Name
Value
Diagram detail level
Default
Member format
UML
Show subpackage contents
Show beans
Referenced Classes
Show Name
Dependencies
Show between classes
Check
All usages
Sequence diagram
Show
2302
2304
Declarations only
All usages
2306
Description
If dependency check between classes is on, this defines what Together will analyze while searching for dependencies between classes or interfaces:
Declarations only - Together will analyze only declarations of attributes, return values of methods and types of parameters.
All usages - Together will also analyze bodies of methods and initial values.
WARNING: Choosing this setting could result in slow performance or large diagrams.
Ok
Cancel
Apply
Advanced >>
Help

FIG. 24

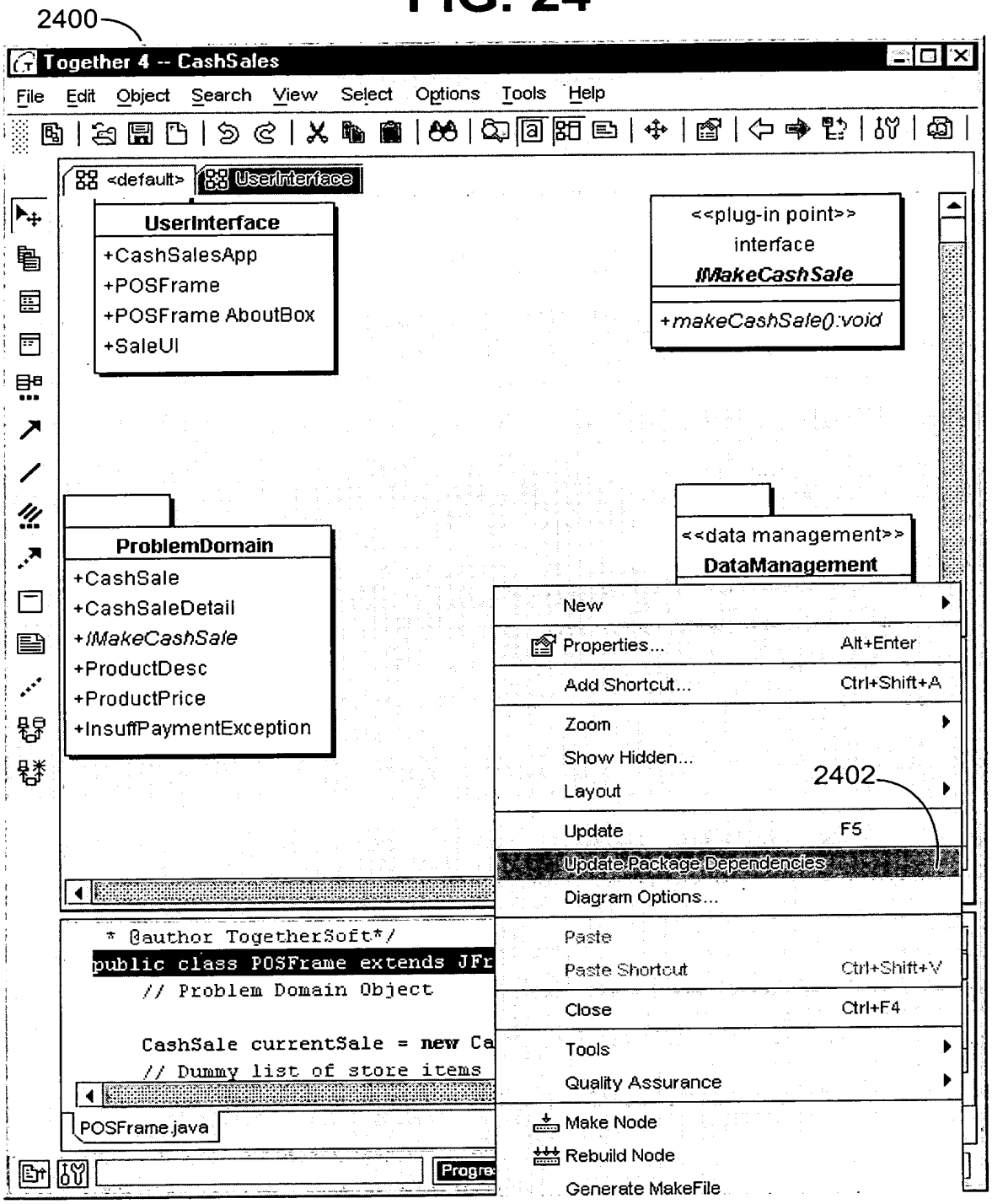

2400
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
ProblemDomain
+CashSale
+CashSaleDetail
+IMakeCashSale
+ProductDesc
+ProductPrice
+InsuffPaymentException
<<data management>>
DataManagement
New
Properties... Alt+Enter
Add Shortcut... Ctrl+Shift+A
Zoom
Show Hidden...
Layout
2402
Update F5
Update Package Dependencies
Diagram Options...
Paste
Paste Shortcut Ctrl+Shift+V
Close Ctrl+F4
Tools
Quality Assurance
Make Node
Rebuild Node
Generate MakeFile
* @author TogetherSoft*/
public class POSFrame extends JFr
// Problem Domain Object
CashSale currentSale = new Ca
// Dummy list of store items
POSFrame.java

FIG. 25

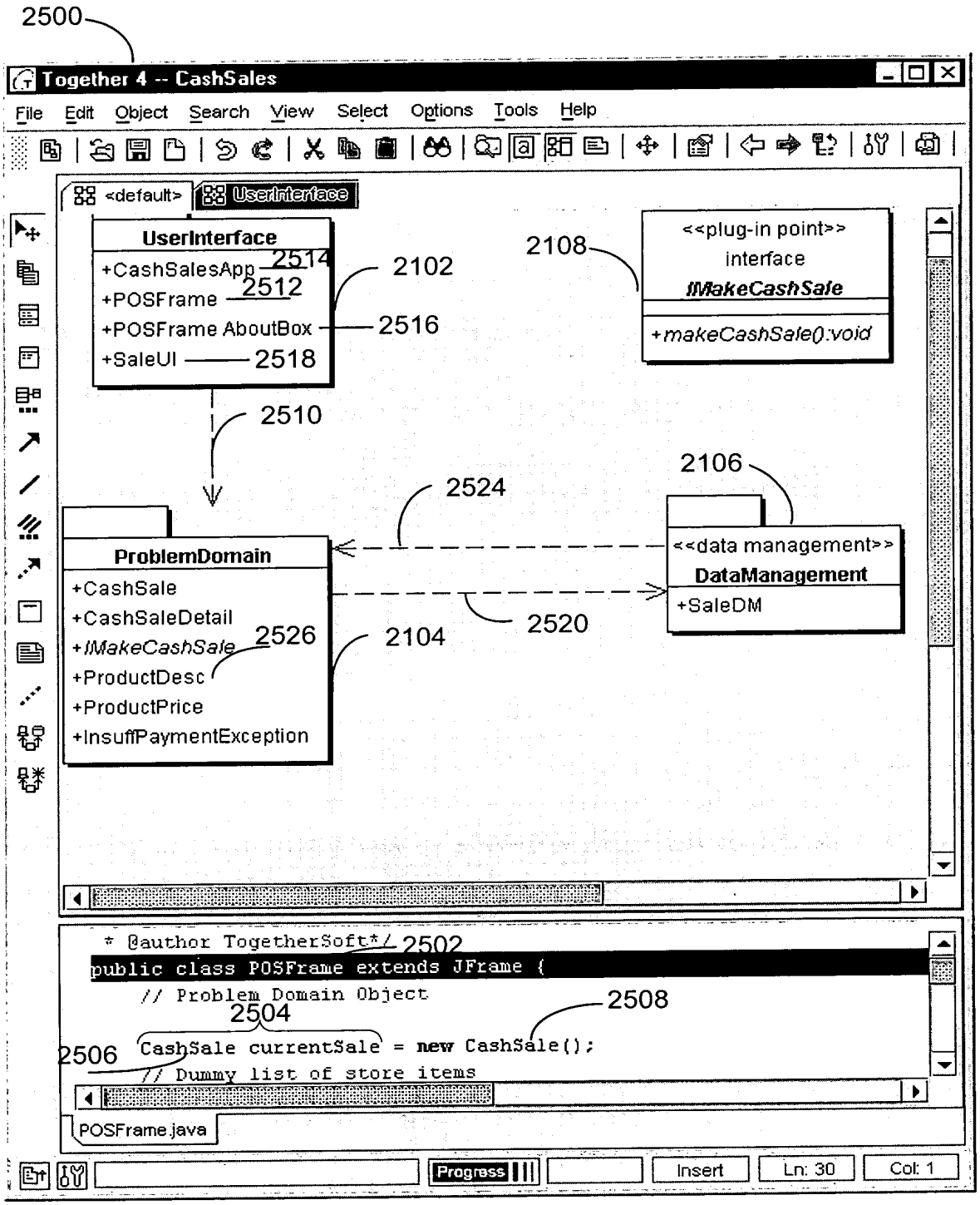

2500
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
2514
2512
2516
2518
2102
2108
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
2510
2106
2524
ProblemDomain
+CashSale
+CashSaleDetail
+IMakeCashSale
+ProductDesc
+ProductPrice
+InsuffPaymentException
2526
2104
<<data management>>
DataManagement
+SaleDM
2520
* @author TogetherSoft*/
2502
public class POSFrame extends JFrame {
// Problem Domain Object
2504
2508
2506
CashSale currentSale = new CashSale();
// Dummy list of store items
POSFrame.java
Progress
Insert
Ln: 30
Col: 1

FIG. 26

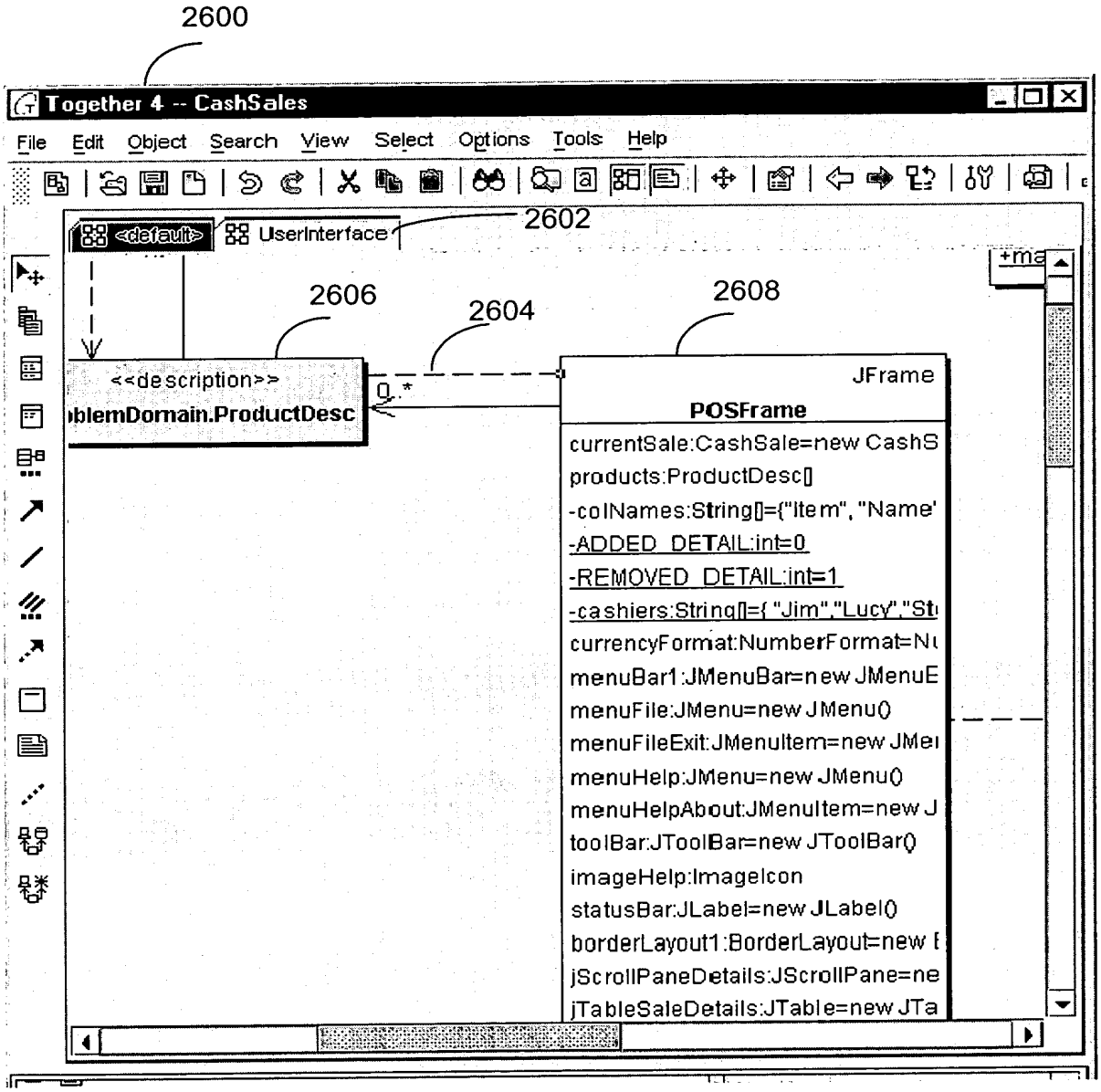

2600
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
2602
2606
2604
2608
<<description>>
blemDomain.ProductDesc
0..*
JFrame
POSFrame
currentSale:CashSale=new CashS
products:ProductDesc[]
-colNames:String[]={"Item","Name'
-ADDED_DETAIL:int=0
-REMOVED_DETAIL:int=1
-cashiers:String[]={"Jim","Lucy","St
currencyFormat:NumberFormat=Nu
menuBar1:JMenuBar=new JMenuE
menuFile:JMenu=new JMenu()
menuFileExit:JMenuItem=new JMe
menuHelp:JMenu=new JMenu()
menuHelpAbout:JMenuItem=new J
toolBar:JToolBar=new JToolBar()
imageHelp:ImageIcon
statusBar:JLabel=new JLabel()
borderLayout1:BorderLayout=new E
jScrollPaneDetails:JScrollPane=ne
jTableSaleDetails:JTable=new JTa

FIG. 27A

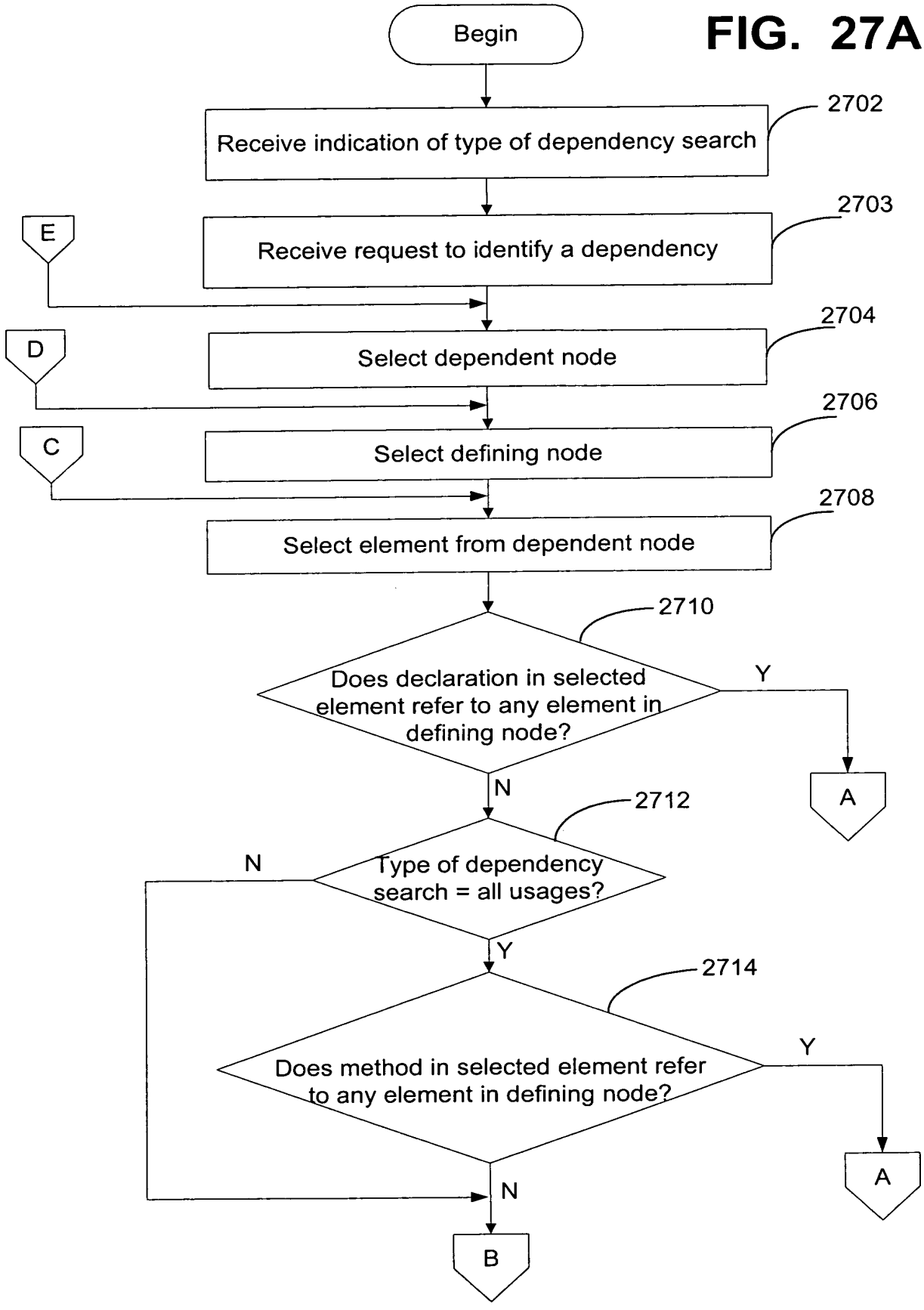

Begin
Receive indication of type of dependency search
2702
Receive request to identify a dependency
2703
E
Select dependent node
2704
D
Select defining node
2706
C
Select element from dependent node
2708
Does declaration in selected element refer to any element in defining node?
2710
Y
A
N
Type of dependency search = all usages?
2712
N
Y
Does method in selected element refer to any element in defining node?
2714
Y
A
N
B

FIG. 27B

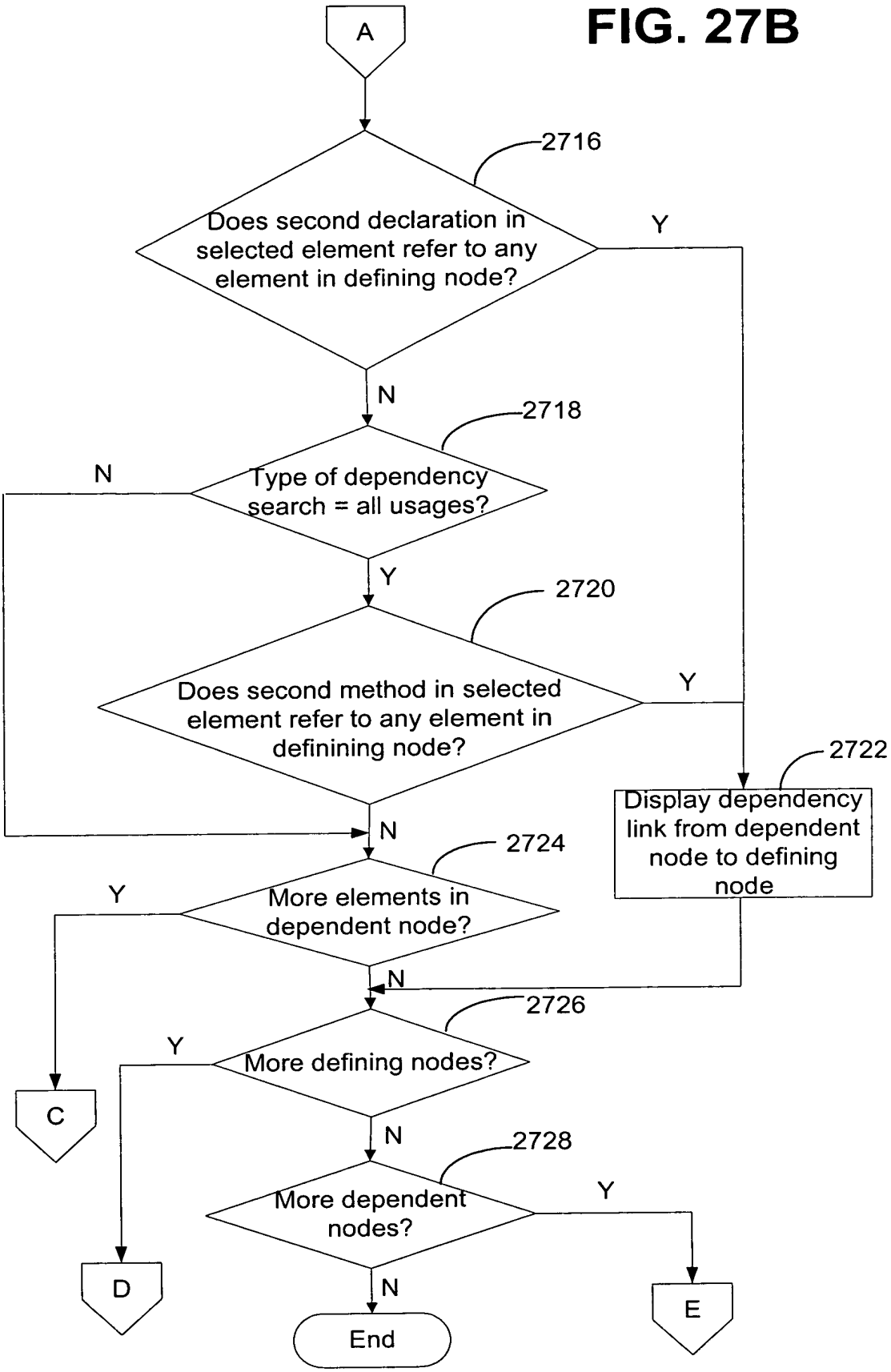

A
2716
Does second declaration in selected element refer to any element in defining node?
Y
N
2718
Type of dependency search = all usages?
N
Y
2720
Does second method in selected element refer to any element in definining node?
Y
2722
Display dependency link from dependent node to defining node
N
2724
More elements in dependent node?
Y
N
2726
More defining nodes?
Y
C
N
2728
More dependent nodes?
Y
D
N
End
E

FIG. 28A

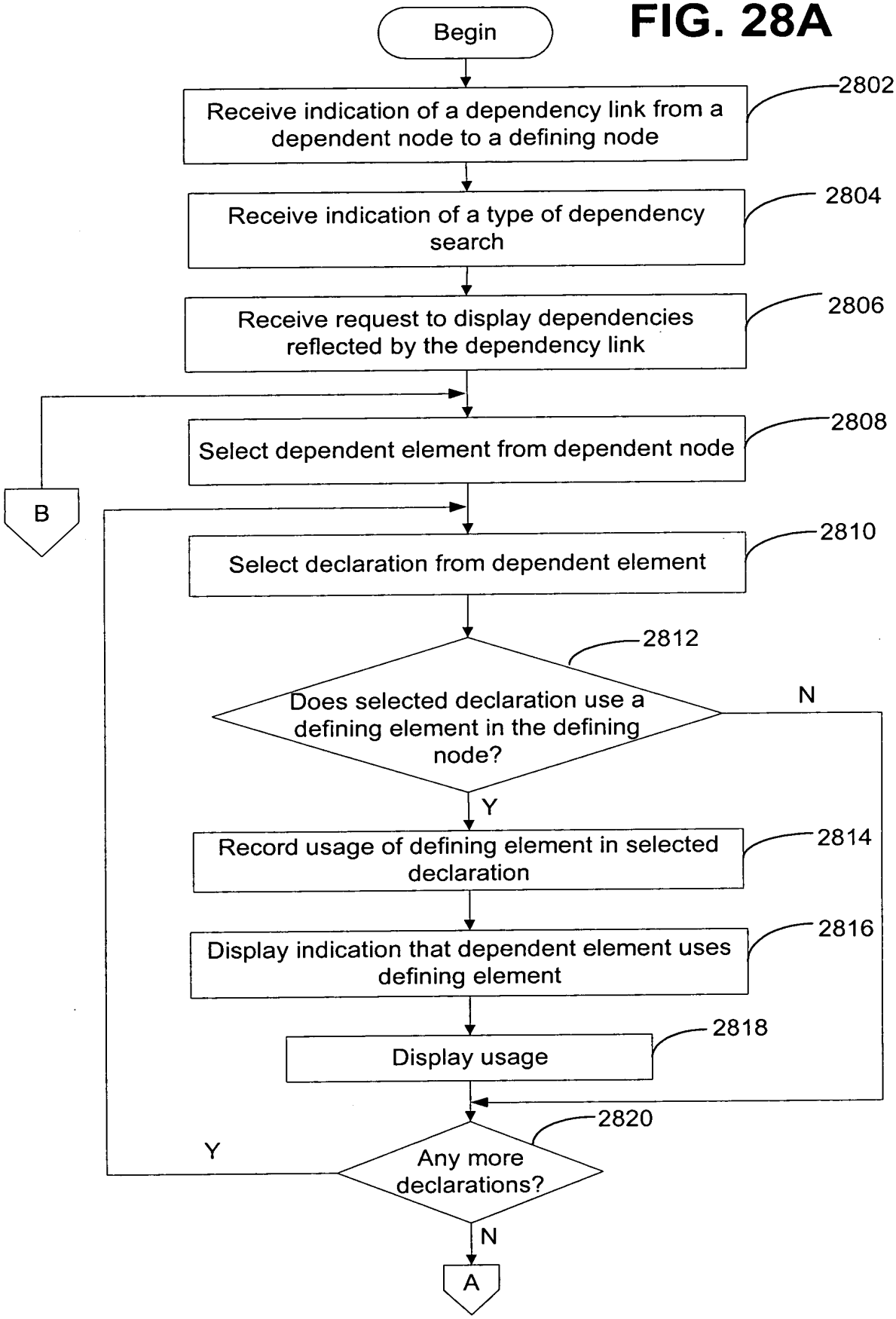

Begin
Receive indication of a dependency link from a dependent node to a defining node
2802
Receive indication of a type of dependency search
2804
Receive request to display dependencies reflected by the dependency link
2806
Select dependent element from dependent node
2808
B
Select declaration from dependent element
2810
Does selected declaration use a defining element in the defining node?
2812
N
Y
Record usage of defining element in selected declaration
2814
Display indication that dependent element uses defining element
2816
Display usage
2818
Any more declarations?
2820
Y
N
A

FIG. 28B

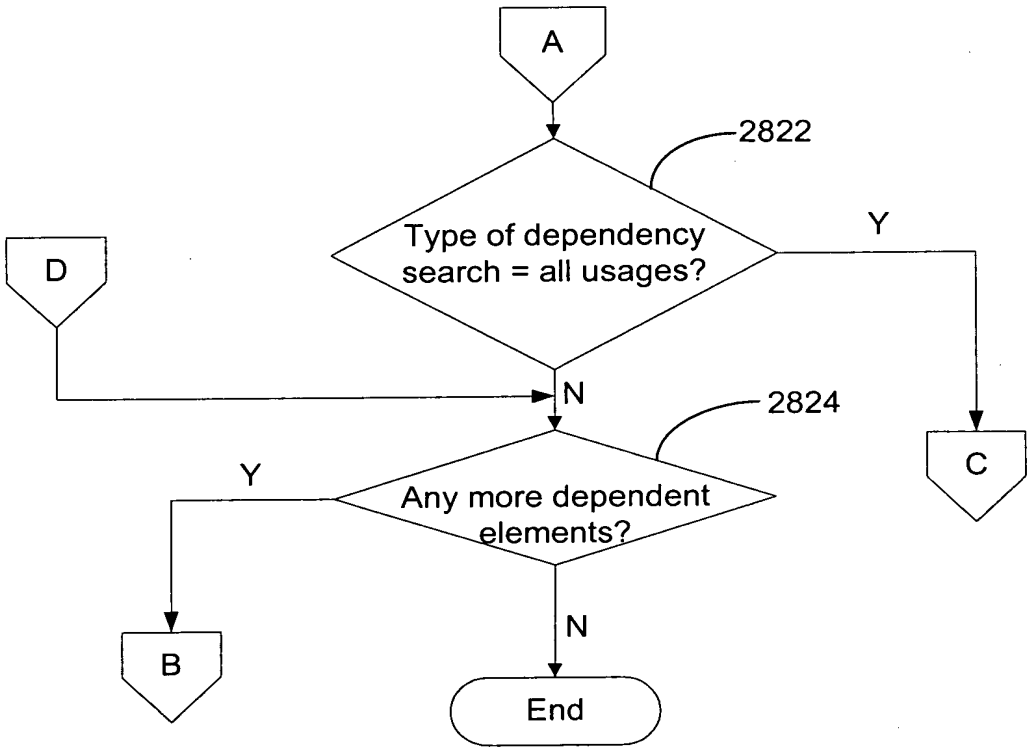

A
2822
Type of dependency search = all usages?
Y
D
N
2824
C
Y
Any more dependent elements?
N
B
End

FIG. 28C

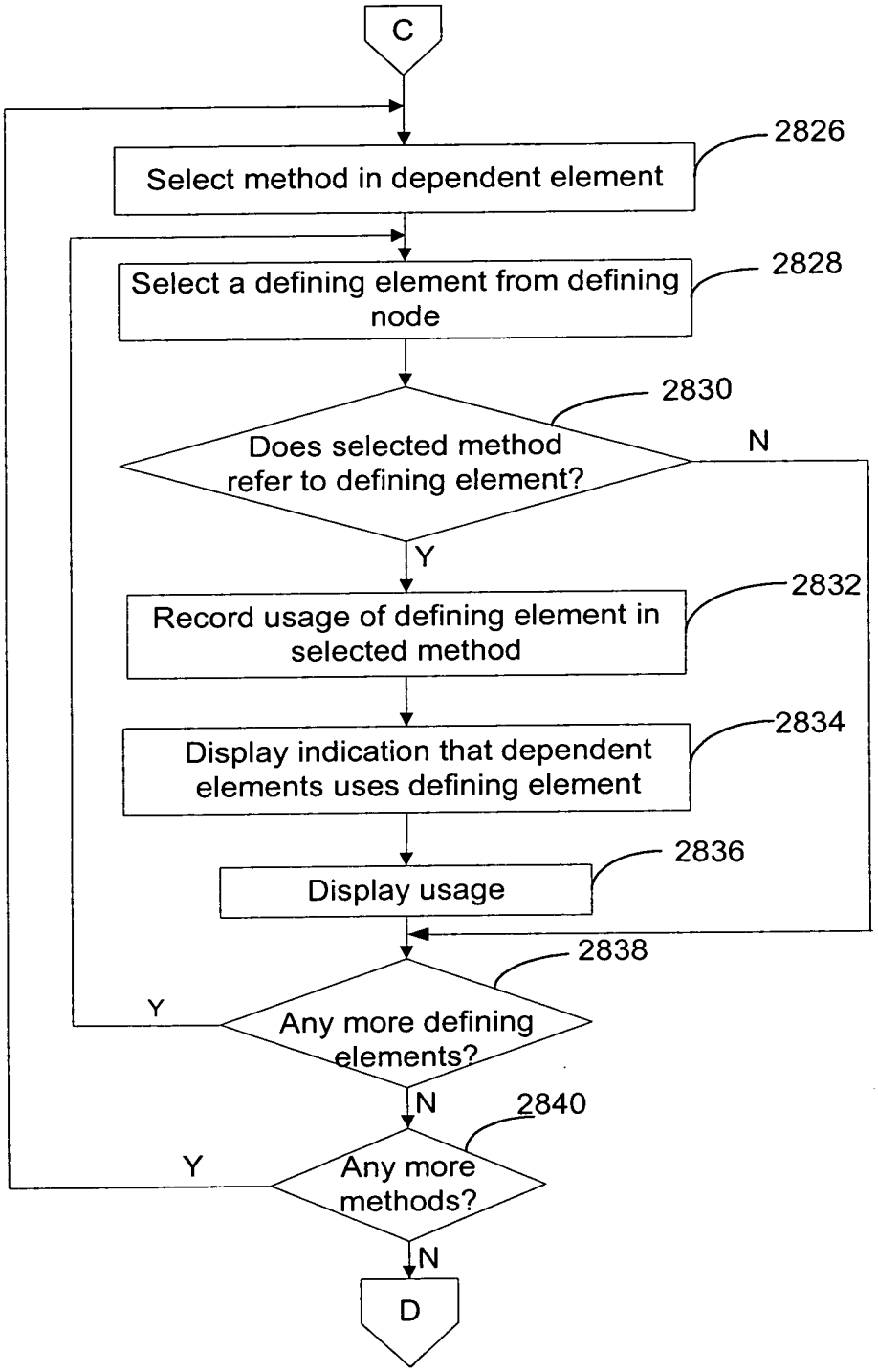

C
Select method in dependent element
2826
Select a defining element from defining node
2828
Does selected method refer to defining element?
2830
N
Y
Record usage of defining element in selected method
2832
Display indication that dependent elements uses defining element
2834
Display usage
2836
Any more defining elements?
2838
Y
N
Any more methods?
2840
Y
N
D

FIG. 29

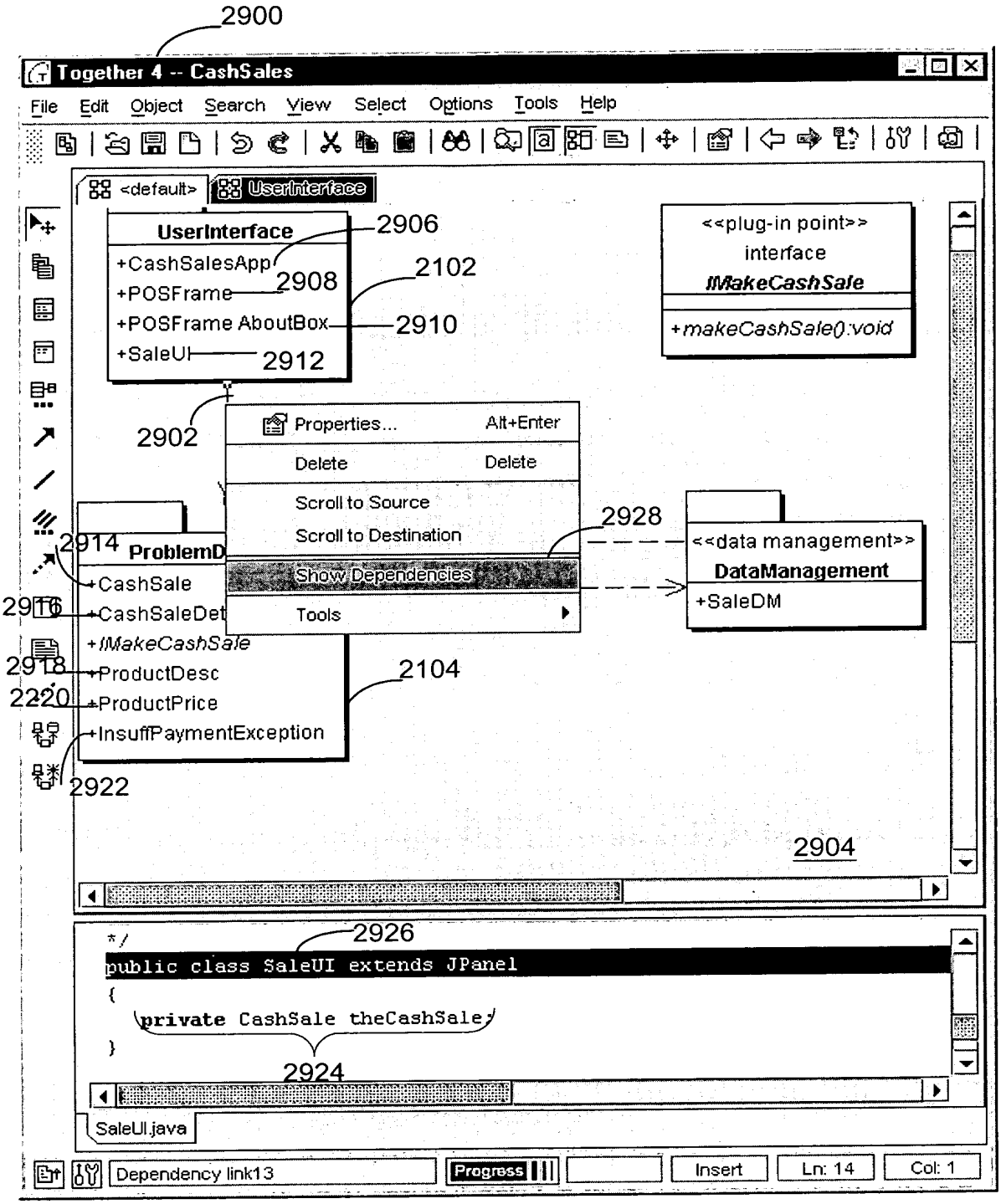
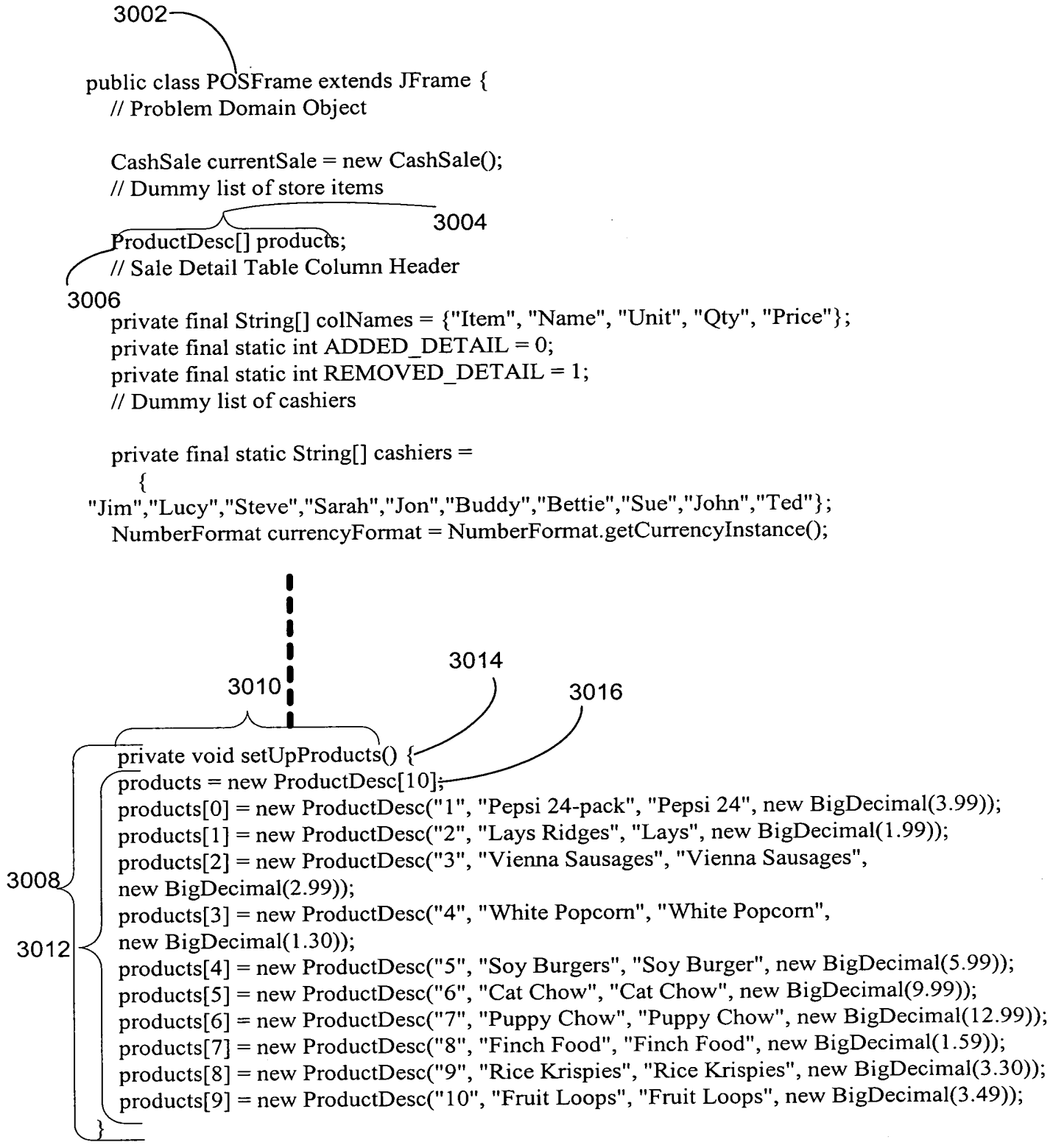

2900
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
2906
2908
2102
2910
2912
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
2902
Properties... Alt+Enter
Delete Delete
Scroll to Source
Scroll to Destination
Show Dependencies
Tools
2928
<<data management>>
DataManagement
+SaleDM
2914
ProblemD
+CashSale
+CashSaleDet
+IMakeCashSale
+ProductDesc
+ProductPrice
+InsuffPaymentException
2916
2918
2220
2104
2922
2904
*/
public class SaleUI extends JPanel
{
private CashSale theCashSale;
}
2926
2924
SaleUI.java
Dependency link13
Progress
Insert
Ln: 14
Col: 1

FIG. 30


3002
public class POSFrame extends JFrame {
// Problem Domain Object
CashSale currentSale = new CashSale();
// Dummy list of store items
3004
ProductDesc[] products;
// Sale Detail Table Column Header
3006
private final String[] colNames = {"Item", "Name", "Unit", "Qty", "Price"};
private final static int ADDED_DETAIL = 0;
private final static int REMOVED_DETAIL = 1;
// Dummy list of cashiers
private final static String[] cashiers =
{
"Jim","Lucy","Steve","Sarah","Jon","Buddy","Bettie","Sue","John","Ted"};
NumberFormat currencyFormat = NumberFormat.getCurrencyInstance();
3010
3014
3016
private void setUpProducts() {
products = new ProductDesc[10];
products[0] = new ProductDesc("1", "Pepsi 24-pack", "Pepsi 24", new BigDecimal(3.99));
products[1] = new ProductDesc("2", "Lays Ridges", "Lays", new BigDecimal(1.99));
products[2] = new ProductDesc("3", "Vienna Sausages", "Vienna Sausages",
new BigDecimal(2.99));
products[3] = new ProductDesc("4", "White Popcorn", "White Popcorn",
new BigDecimal(1.30));
products[4] = new ProductDesc("5", "Soy Burgers", "Soy Burger", new BigDecimal(5.99));
products[5] = new ProductDesc("6", "Cat Chow", "Cat Chow", new BigDecimal(9.99));
products[6] = new ProductDesc("7", "Puppy Chow", "Puppy Chow", new BigDecimal(12.99));
products[7] = new ProductDesc("8", "Finch Food", "Finch Food", new BigDecimal(1.59));
products[8] = new ProductDesc("9", "Rice Krispies", "Rice Krispies", new BigDecimal(3.30));
products[9] = new ProductDesc("10", "Fruit Loops", "Fruit Loops", new BigDecimal(3.49));
}
3008
3012

3102

FIG. 31

```
public class ProductDesc {

    /** Use it if you need to identify Products as specific types. */
    private int type;

    /** Product name. For example: Goetze's Caramel Cremes */
    private String name;

    /** This is the unique identifying number. Something like a UPC for retail
    products. */
    private String itemNumber;

    /** Default price. */
    private BigDecimal defaultPrice;

    /** Some prose describing the product in all its glory. */
    private String description;

    /**
     *List of prices. If this list has elements, then they are checked. Otherwise,
      the default price is used. <p>
     * @supplierCardinality 1..*
     * @associates <b>ProductPrice</b>
     */
    private Vector priceObjects;

/* ============================================================
 * Constructors
 * ============================================================ */

3104
    /** Constructor requires all parameters. Type is defaulted to 0 since we
    aren't using it. */
    public ProductDesc(String anItemNum, String aDesc, String aName,
    BigDecimal aPrice) {
        type = 0; // not currently used
        itemNumber = anItemNum;
        description = aDesc;
        name = aName;
        defaultPrice = aPrice;
        priceObjects = new Vector();
    } // END ProductDesc(...)
```

FIG. 32

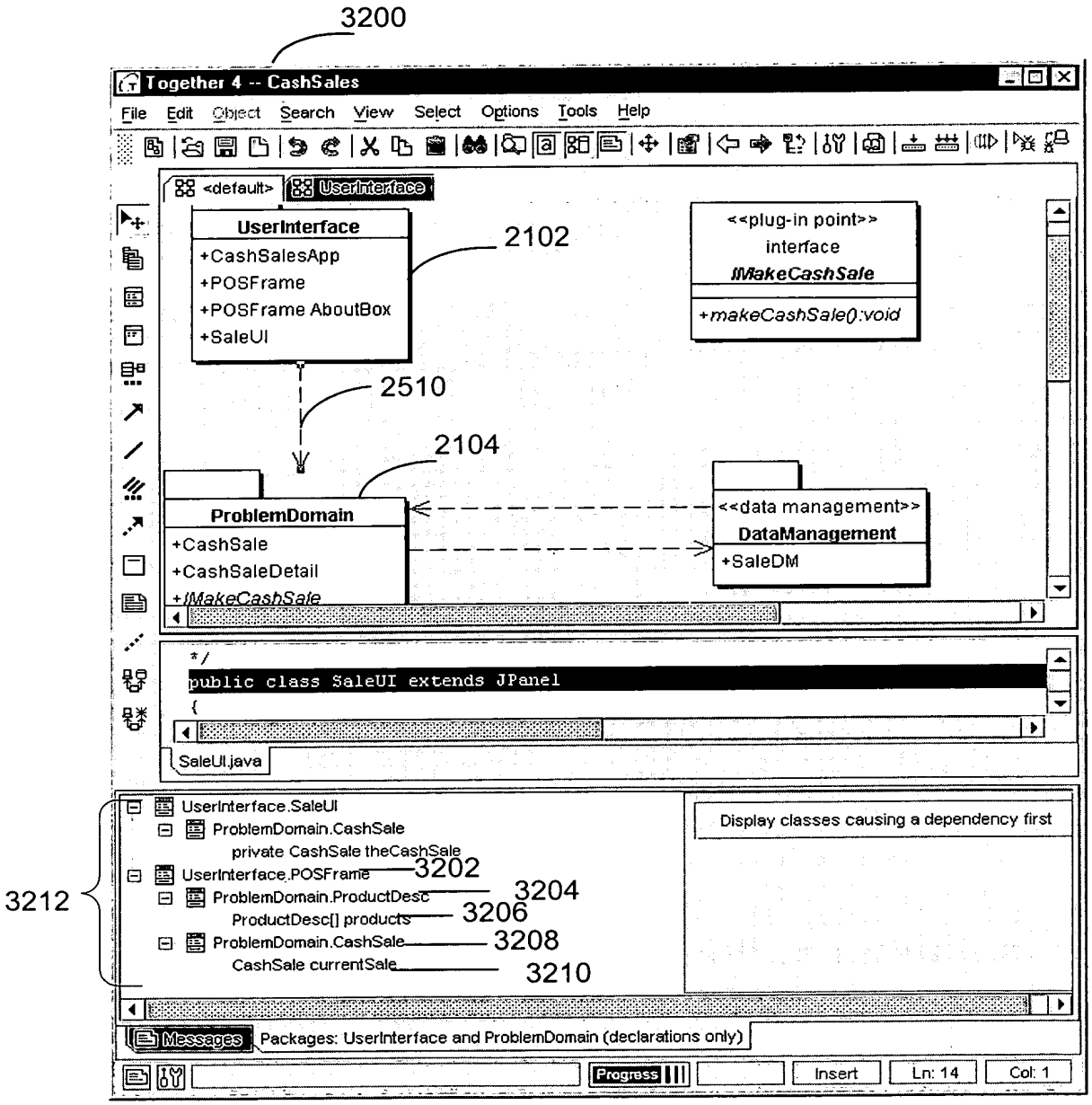

3200
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
2102
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
2510
2104
ProblemDomain
+CashSale
+CashSaleDetail
+IMakeCashSale
<<data management>>
DataManagement
+SaleDM
*/
public class SaleUI extends JPanel
{
SaleUI.java
UserInterface.SaleUI
ProblemDomain.CashSale
private CashSale theCashSale
UserInterface.POSFrame
3202
ProblemDomain.ProductDesc
3204
ProductDesc[] products
3206
ProblemDomain.CashSale
3208
CashSale currentSale
3210
3212
Display classes causing a dependency first
Messages
Packages: UserInterface and ProblemDomain (declarations only)
Progress
Insert
Ln: 14
Col: 1

FIG. 33

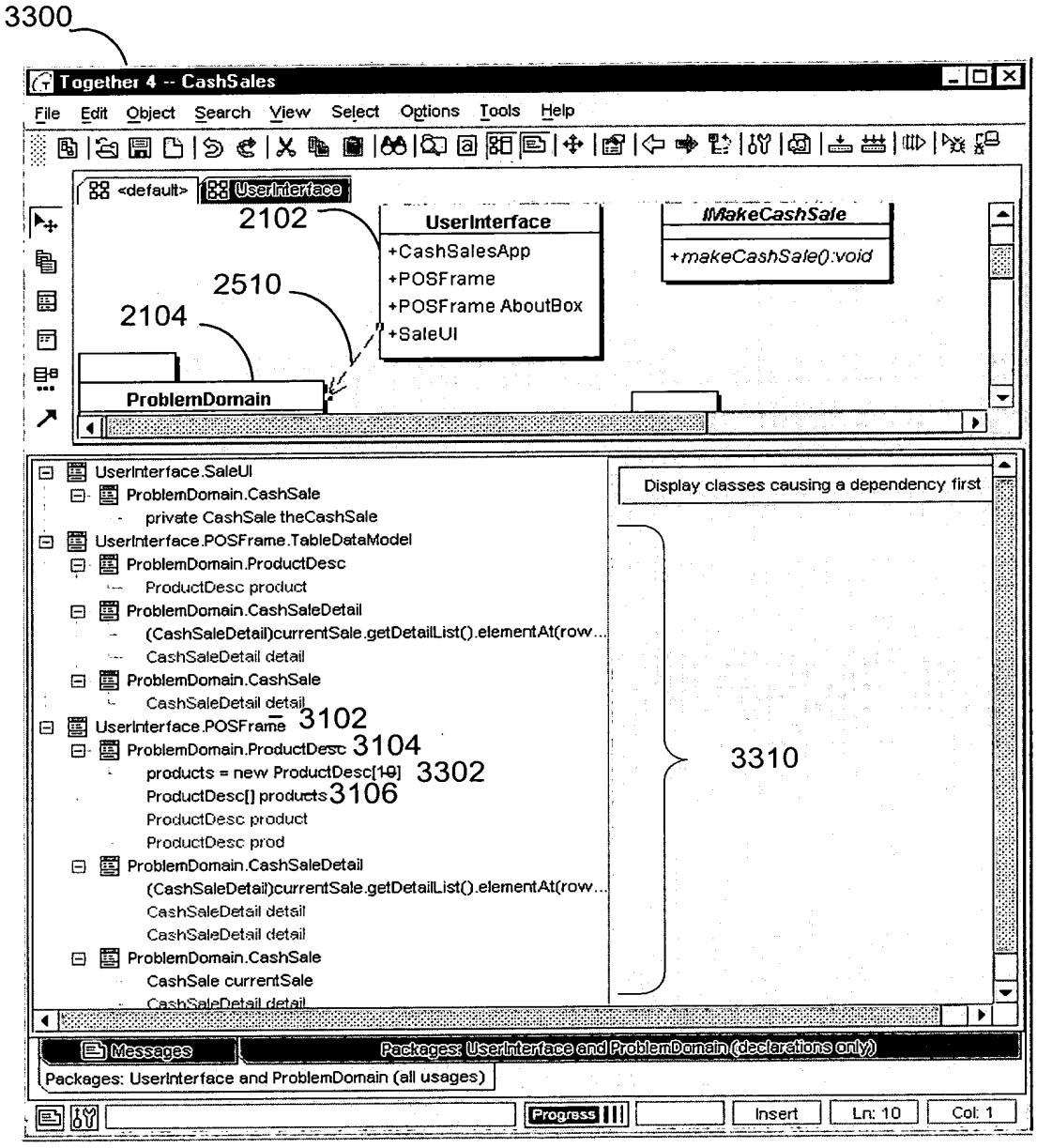

3300
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
2102
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
2510
2104
ProblemDomain
IMakeCashSale
+makeCashSale():void
UserInterface.SaleUI
ProblemDomain.CashSale
private CashSale theCashSale
UserInterface.POSFrame.TableDataModel
ProblemDomain.ProductDesc
ProductDesc product
ProblemDomain.CashSaleDetail
(CashSaleDetail)currentSale.getDetailList().elementAt(row...
CashSaleDetail detail
ProblemDomain.CashSale
CashSaleDetail detail
UserInterface.POSFrame
3102
ProblemDomain.ProductDesc
3104
products = new ProductDesc[19]
3302
ProductDesc[] products
3106
ProductDesc product
ProductDesc prod
ProblemDomain.CashSaleDetail
(CashSaleDetail)currentSale.getDetailList().elementAt(row...
CashSaleDetail detail
CashSaleDetail detail
ProblemDomain.CashSale
CashSale currentSale
CashSaleDetail detail
Display classes causing a dependency first
3310
Messages
Packages: UserInterface and ProblemDomain (declarations only)
Packages: UserInterface and ProblemDomain (all usages)
Progress
Insert
Ln: 10
Col: 1

FIG. 34

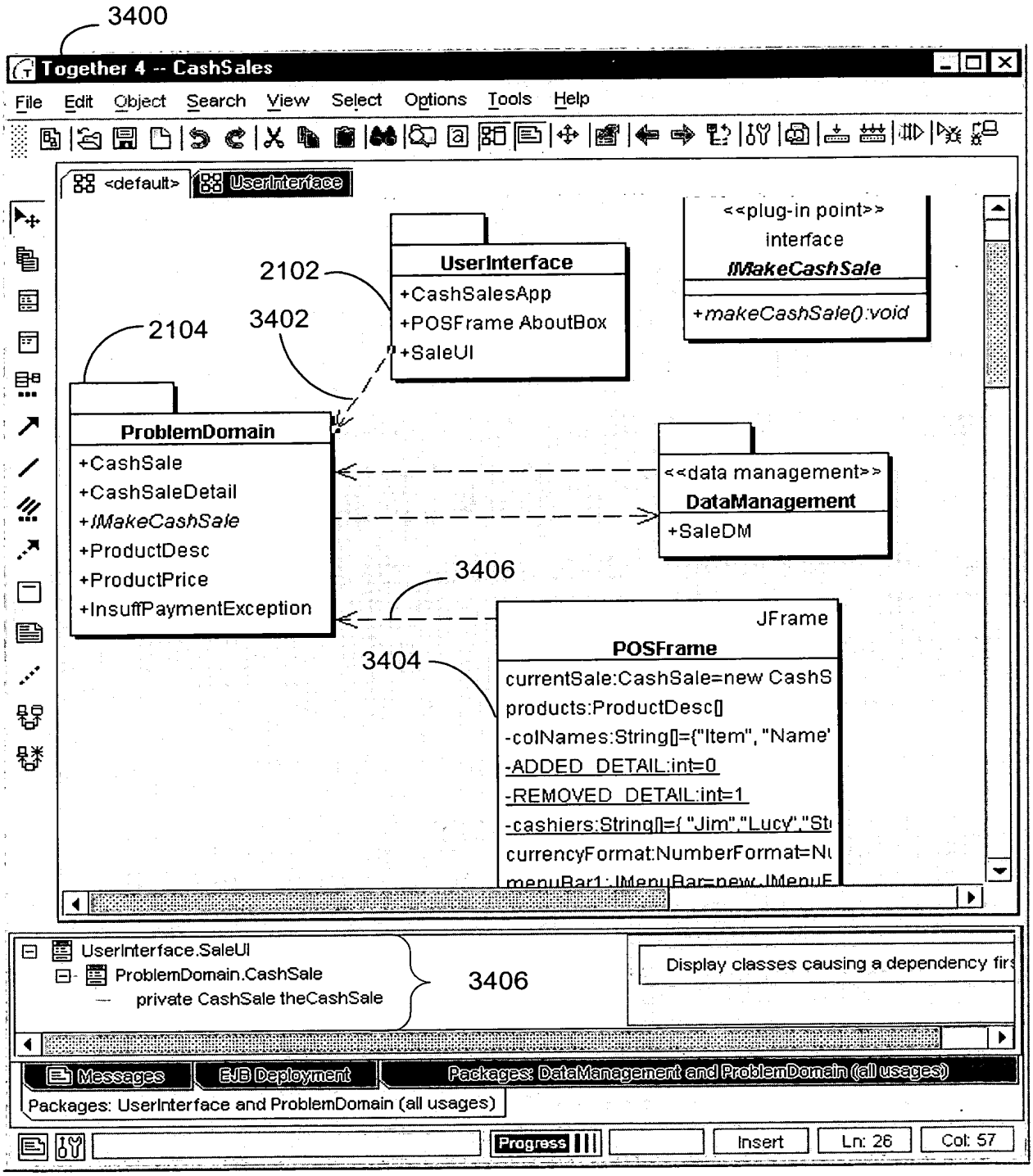

3400
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
2102
UserInterface
+CashSalesApp
+POSFrame AboutBox
+SaleUI
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
2104
3402
ProblemDomain
+CashSale
+CashSaleDetail
+IMakeCashSale
+ProductDesc
+ProductPrice
+InsuffPaymentException
<<data management>>
DataManagement
+SaleDM
3406
3404
JFrame
POSFrame
currentSale:CashSale=new CashS
products:ProductDesc[]
-colNames:String[]={"Item", "Name'
-ADDED_DETAIL:int=0
-REMOVED_DETAIL:int=1
-cashiers:String[]={"Jim","Lucy","St
currencyFormat:NumberFormat=Nu
UserInterface.SaleUI
ProblemDomain.CashSale
private CashSale theCashSale
3406
Display classes causing a dependency firs
Messages
EJB Deployment
Packages: DataManegement and ProblemDomain (all usages)
Packages: UserInterface and ProblemDomain (all usages)
Progress
Insert
Ln: 26
Col: 57

FIG. 35

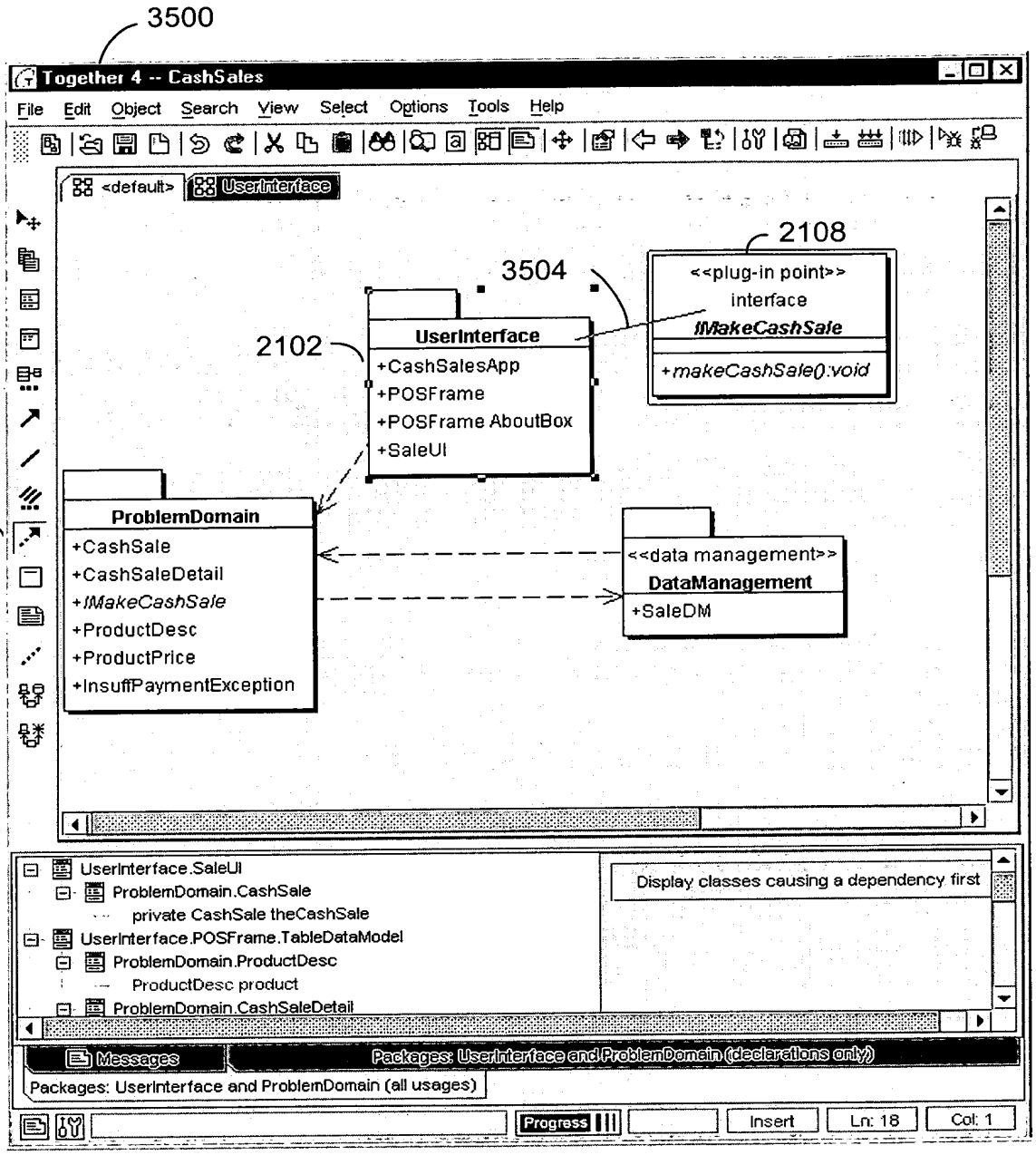
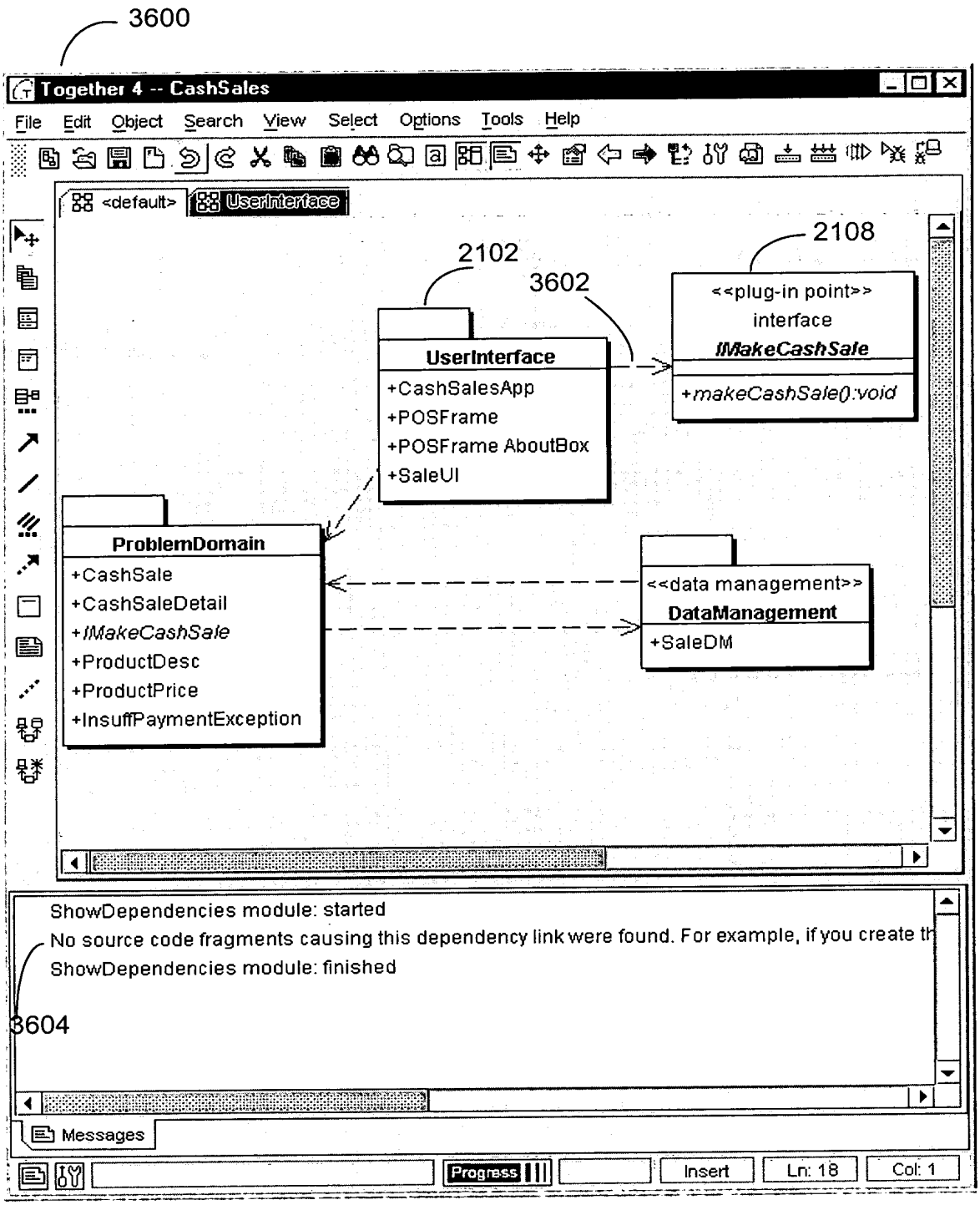

3500
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
2108
3504
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale0:void
2102
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
3502
ProblemDomain
+CashSale
+CashSaleDetail
+IMakeCashSale
+ProductDesc
+ProductPrice
+InsuffPaymentException
<<data management>>
DataManagement
+SaleDM
UserInterface.SaleUI
ProblemDomain.CashSale
private CashSale theCashSale
UserInterface.POSFrame.TableDataModel
ProblemDomain.ProductDesc
ProductDesc product
ProblemDomain.CashSaleDetail
Display classes causing a dependency first
Messages
Packages: UserInterface and ProblemDomain (declarations only)
Packages: UserInterface and ProblemDomain (all usages)
Progress
Insert
Ln: 18
Col: 1

FIG. 36


3600
Together 4 -- CashSales
File Edit Object Search View Select Options Tools Help
<default>
UserInterface
2102
3602
2108
UserInterface
+CashSalesApp
+POSFrame
+POSFrame AboutBox
+SaleUI
<<plug-in point>>
interface
IMakeCashSale
+makeCashSale():void
ProblemDomain
+CashSale
+CashSaleDetail
+IMakeCashSale
+ProductDesc
+ProductPrice
+InsuffPaymentException
<<data management>>
DataManagement
+SaleDM
ShowDependencies module: started
No source code fragments causing this dependency link were found. For example, if you create th
ShowDependencies module: finished
3604
Messages
Progress
Insert
Ln: 18
Col: 1